The Battle of the Gods and Giants Redux

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The Battle of the Gods and Giants Redux

Papers Presented to Thomas M. Lennon

Edited by

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Introduction: Explanatory Narratives in the History of Philosophy

Patricia Easton

Thinkers of the early modern period, particularly seventeenth-century Europe, were faced with an increasingly destabilized Aristotelian model of nature. The new mechanical philosophy, one that viewed nature as a machine, captivated the imaginations of the leading intellectuals in England, France, Germany and beyond. Yet, how the new mechanical model should be constructed—what metaphysics could best support the physics of matter in motion, and what method would best generate the evidence and demonstrations of the new science—were highly contested subjects. Thomas Lennon's ground-breaking study, *The Battle of the Gods and the Giants: The Legacies of Descartes and Gassendi, 1655–1715*,[1] posits Descartes as the leader of the Gods, and Gassendi as the leader of the Giants, and argues persuasively that they defined the terms and debates that shaped early modern philosophy. Lennon's reconstructions of the dialectics that raged in the latter half of the seventeenth century help us to step into the early modern age while eliciting the truths as well as the uncertainties of the past and present. The title of this volume is a tribute to Lennon's seminal work, and the impact it has had on scholarship in the field.

Plato's *Sophist* tells the compelling story of a perennial and interminable battle of ideas between the friends of the forms—the Gods—and the friends of matter—the Giants.[2] The army of the Gods places *being* in the forms; the forms are real and absolute, as is their authority. The army of the Giants drags *being* down to matter; matter is relative and changing. How is it that we attribute hot and cold, motion and rest, virtue and vice to the *same* being? What becomes of qualities like justice and wisdom in the uncertain hands of the giants, and in the assured minds of the Gods? Ultimately questions of being in the battle come down to normative questions of the proper exercise of moral and political authority. And, although the terms shift and change through time and place, and different historical moments yield different winners and losers, the battle rages on.

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1 Thomas M. Lennon. *The Battle of the Gods and the Giants: The Legacies of Descartes and Gassendi, 1655–1715*. Princeton: Princeton University Press, 1993.
2 Plato, *Sophist*. Translated with an introduction by Nicholas P. White. Indianapolis: Hackett Publishers, 1993.

Lennon's contributions to early modern philosophical scholarship are broad and deep. A quick perusal of his bibliography (included as an appendix to this volume) shows he has produced significant studies of major philosophers such as Descartes, Gassendi, Locke, Berkeley, and Hume. Moreover, Lennon has helped to bring various "minor" thinkers such as Desgabets, Régis, Cudworth, Foucher, Bernier, Huet, François Bayle, and Pierre Bayle to the fore of scholarly discussions. Such additions have enriched our understanding of the issues as they were understood in the period, and built bridges to the philosophical discussions of the present. Lennon's translation and commentary on Nicolas Malebranche's *Search After Truth* has stimulated the much-deserved restoration of Malebranche to the major list of thinkers of the seventeenth century.[3] Beyond these important contributions is Lennon's approach to telling the history of philosophy. Lennon describes his approach as having one foot in the camp of the historians of ideas, who are concerned with the interpretation of texts in historical terms; the other foot in the camp of the historians of philosophy, who are concerned with the interpretation of text only in so far as it informs contemporary philosophical concerns. By adopting the nominalist-relativist stance of the giants, Lennon argues that our job is to construct simpler, more efficient, more fruitful, and more interesting *histories* of philosophy.[4] Once freed of the realist-absolutist goal of finding *the* history of philosophy, philosophy and history become continuous, and the two camps, whether they be historians of philosophy and historians of ideas, or gods and giants, find themselves along a continuum. Rather than an interminable battle awaiting a victor or a grand synthesis, there are multiple histories to be told with multiple perspectives to be represented. Out of the values of relativism, skepticism, and tolerance comes the unity of epistemic and political difference.

There are other metaphors and narratives not unlike Lennon's gods and giants that offer a framework for a simple, efficient, fruitful, and interesting history of philosophy. For example, in Isaiah Berlin's famous essay on Tolstoy he famously quips, "The fox knows many things, but the hedgehog knows one big thing." He proceeds to classify thinkers and philosophers throughout history into one of the two camps: the hedgehog, who views the world through the lens of a single defining idea such as Plato, Lucretius, Pascal, Hegel, Nietzsche, etc., and the fox who draws on a wide variety of experiences and for whom the world cannot be boiled down to a single idea, such as Aristotle, Erasmus,

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3   Nicolas Malebranche. *The Search After Truth* and *Elucidations of the Search After Truth*. Translation by T.M. Lennon with P.J. Olscamp, with introduction, bibliography, chronology and Latin translations by TML. Cambridge: Cambridge University Press, 1997, xlvi + 775 pp.

4   See sections 29–30 in Lennon, 1993, pp. 378–392.

Montaigne, Goethe, and Joyce. He labors with where to place Tolstoy and ulti-
mately places him with a foot solidly in each camp. Or to keep with the meta-
phor, Tolstoy has spines and a long bushy tail.

Although Berlin admits that he never meant the essay as seriously as it was
taken, he did think that, "Every classification throws light on something."[5] It
is curious why Berlin's idea of hedgehog and fox stimulated as much intellec-
tual discussion as it did, which is evidence that classification has something
beyond an illuminating power.

Classification helps us order, select, and explain the data of history. The study
of philosophy and its history should show us something about how humanity
has embodied its views of the world and its judgments of life. It should also
teach us something about how to think critically about our own views of the
world, and to question our assumptions or those of the moment.

Good histories of philosophy should not only be simple, efficient, fruitful,
and interesting, but they should also have explanatory power. This is a varia-
tion on Bernard Williams's notion that looking back at the great philosophers
of a previous epoch may deepen our philosophical understanding of cur-
rent philosophical debates by generating what Nietzsche called an "untimely
perspective."[6] Descartes makes a similar point in his famous remarks in Part
One of the *Discourse* that studying history is like traveling in a foreign land:
"Conversing with those of past centuries is much the same as travelling. It is
good to know something of the customs of various peoples, so that we may
judge our own more soundly and not think that everything contrary to our own
way is irrational, as those who have seen nothing of the world ordinarily do."[7]

There are other thematic approaches to understanding early modern phi-
losophy such as Victor Cousin's systems approach. He organizes thinkers and
their ideas into systems of thought such as idealism, sensualism, skepticism,
and mysticism. Another approach that arguably has fallen short and has lost
its utility is the well-worn distinction of rationalism versus empiricism. This
framework foregrounds epistemological themes, dividing early modern philos-
ophers into camps by virtue of their views on the origin and nature of knowl-
edge. As the story goes, the British Empiricists such as Francis Bacon, Robert

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5   Ramin Jahanbegloo, *Conversations with Isaiah Berlin*. London: Scribner, 2000, page 188.
6   Bernard Williams, "Descartes and the Historiography of Philosophy," in *Reason, Will, and
     Sensation: Studies in Descartes' Metaphysics*, in J. Cottingham (ed.). Oxford: Claredon Press,
     1994, p. 21.
7   René Descartes. *Discourse on Method*, in *The Philosophical Writings of Descartes*, vol. 1 (of
     3 vols.), John Cottingham, Robert Stoothoff, and Dugald Murdoch, trans. and eds. Cambridge
     University Press, 1984.

Boyle, Isaac Newton, John Locke, George Berkeley, and David Hume believed that all knowledge is based on experience so that simple ideas give us the material for all our *a posteriori* reasoning about the world. Certainty in knowledge is only achieved by degrees of probability through the method of experiment and induction. By contrast, the Continental Rationalists such as Descartes, Spinoza, Leibniz, and Malebranche believed in self-evidently true principles that are known *a priori*. Human knowledge at its foundation is known with absolute certainty so long as the proper method is used to arrive at *a priori* truths. The conclusion of this narrative of opposites is said to have awaited the grand synthesis of transcendental idealism developed by Immanuel Kant.

Some historical-philosophical themes are better than others. The rationalism-empiricism framework has been widely criticized on the grounds that it oversimplifies the positions held, by Locke and Descartes, for example, on a number of issues and skews our understanding of the period and these thinkers. Yet, it is also widely agreed that classification of some kind is useful in sorting through the myriad details and complicated texts and arguments of a period. We need some sort of a road map. Lennon's suggestion is to approach texts and arguments not as forms but as matters of study (such as relativized texts) and to formulate as many interpretations as the subject matter affords. In the case of the seventeenth century, if we view the subject field from the Gassendi-as-giant and Descartes-as-god narrative we see the following: 1) on the side of the giants we see empiricism and skepticism in theory of knowledge; nominalism and tychism in metaphysics; and, hedonism in ethics, toleration and anti-authoritarianism in political theory; 2) on the side of the gods we see rationalism and absolutism in theory of knowledge; realism and essentialism in metaphysics; and, enthusiasm in ethics and authoritarianism in politics. Although the explanatory framework Lennon adopts is at root a metaphysical one, idealism and materialism, its logic extends to a wide array of epistemological, moral, theological, and political issues. But, as the study of the individual thinkers and their arguments reveals, the history is messy and non-linear, and the philosophical arguments not always clear and consistent. Yet, materialism and idealism are cogent philosophical positions against which we can judge the arguments of the thinkers we study.

Lennon's approach to the history of philosophy is to take a giant-like stance, one of relativism and nominalism, about philosophy and its history. In constructing the materialist-idealist framework for the early modern period we must judge its success by how well it captures and illuminates the complexities, nuances, deviations, and successes of the philosophical discourse as it is found in the texts, debates, and events of the period. The job of the historian of philosophy is to construct simpler, more efficient, more fruitful, and more

interesting *histories* of philosophy. The explanatory value of the approach, its proof, is in the eating of the pudding. The success of Lennon's *Battle of the Gods and Giants: The Legacies of Descartes and Gassendi 1655–1715*, is evidenced in the fruits of the book itself and in the impact it has had on the scholarship in early modern philosophy over the past twenty years.

The Battle of the Gods and Giants Redux: Papers Presented to Thomas M. Lennon is a collection of 14 original essays by leading scholars in the field. The volume opens with a reflective essay by Richard A. Watson, which functions as a foreword of sorts that celebrates and problematizes the approach to the history of philosophy championed by Lennon. On one level, Watson's essay is a lyrical reinterpretation of Blaise Pascal's piety—or rather lack thereof. On another level, Watson's essay is a critical methodological study of what "shadow history" can teach us about interpreting the historical subject. Watson argues that misrepresentations can do much to construct the course of philosophy even if doing insult to history.

The remainder of the papers have been organized into two main parts. Part One includes figures and topics associated with Descartes, the chief idealist in the story; Part Two includes figures and topics that fall on the Gassendist materialist side of the battle. In organizing these varied discussions along these themes and lines, something more than the sum of the parts emerges. It is hoped that the reader will gain a breadth and depth of insight into the battle of ideas in early modern thought—historical, philsophical, and interpretive.

Part One: The Gods opens with an essay by Tad Schmaltz, which sets the stage for receptions of Descartes's thought in the latter part of the seventeenth century. He argues that Régis stands in as the early modern Aristotelian and Malebranche as the early modern Plato. His study redraws the battle lines of the gods and the giants within the Cartesian school and connects them to specific doctrines found in the ancients.

Nicholas Jolley examines Leibniz's theories of nativism in knowledge, arguing in favor of his "reflection account" over his less Platonic "dispositional account." Here we see in more detail why Lennon would be reluctant to position Leibniz among the gods as well as the giants. José Maia Neto examines Lennon's criticism of Popkin's "standard interpretation" of Descartes's skepticism, and provides a qualified defense of Lennon's view that Descartes's methodological skepticism should be viewed within the tradition of Academic not Pyrrhonist Skepticism. Kurt Smith defends Descartes's account of clarity and distinctness against charges that the doctrine is circular and/or superfluous. Smith's essay challenges Lennon's portrayal of Descartes's idealism, but does not reject it. Alan Nelson and Brian Rogers develop the theme of Descartes's idealism in taking up the "paradox of deduction," wherein inferences cannot

be both valid (where the conclusion is contained in the premises) and useful (where the conclusion extends our knowledge beyond the premises). Using Descartes's theory of distinction, they argue that Descartes's use of "cognitive routes" explains how Cartesian deduction extends knowledge. Also drawing on Descartes's idealism via his theory of distinction, Lawrence Nolan reviews the renewed controversy over Descartes's doctrine of mind-body union. Nolan argues against attempts to see the union as a third substance or "trialist" theory, in favor of a conceptualist reading of the mind-body relation that enriches the traditional dualist interpretation. Steven Nadler takes up an examination of Spinoza's overall religious and political project in the *Theological-Political Treatise* and the influence of the rationalist medieval philosopher, Maimonides. Lennon places Spinoza in the camp of the gods, again after some complications. Julie Walsh's paper on Malebranche rounds out the gods in the story, arguing that mental attention corrects both error and sin, thus providing a central role for attention in Malebranche's account of human freedom.

Part Two: The Giants opens with Donald Rutherford's discussion of Hobbes on laws of nature. Rutherford argues for the "Virtue-Law Equivalence Thesis" that laws are also virtues, i.e., principles of prudence. Although this thesis shows Hobbes to be on the side of the giants in moral-political theory, the task is shown to be a complicated and intricate one. Patricia Easton's essay on Pierre Bayle further examines the debate over whether Bayle was an irreligious skeptic or a sincere Calvinist and skeptic. Bayle embodies the internal struggle between the gods and the giants in his quest for moral truth in the face of skepticism. Among the giants of the period, Margaret Atherton reconstructs what Berkeley would have said about Locke's chapter entitled "Of the Reality of Knowledge," a study with some surprises given Locke's representative realism and Berkeley's direct realism. Martha Bolton examines Berkeley's account of psychological operations in his theory of vision, showing how he could employ geometry in his description while denying the reality of lines, angles, and unconscious reasoning. In a third essay on Berkeley in the collection, Falkenstein raises interpretive issues surrounding Berkeley's account of spatial distance. Given Berkeley's rejection of materialism and assertion of sensualism, Falkenstein argues contra Lennon that Berkeley required a robust theory of vision to account for perception of distant objects.

Twenty years after the publication of Lennon's *Battle of the Gods and the Giants*, and in light of the more than dozen books and 60 articles Lennon has published in the burgeoning field of Cartesian studies over the past forty years, it is time for the gods to smile upon the giants and the battlefield of ideas to be opened. Lennon has changed for the better the range, depth and complexity of the issues studied in early modern philosophy. Lennon's work exempli-

fies what all good historians of philosophy strive for: examinations of the great thinkers and their arguments in terms common to the period, while bringing to life the ambiguities, complexities, incongruities and solutions embodied in those arguments and debates. Lennon brings philosophy to life through the lens of the past, and brings history to account through an analysis of its ideas and arguments. In his work he recognizes the complexity and controversial nature of philosophical ideas—the interminable battle—and celebrates it. These papers are offered as colleague and fellow traveller in the non-ending battle over ideas.

Pascal, Piety, and Les Roannez

Richard Watson

On 30 April 1635, Étienne Pascal rented a house on the south side of rue de Brisemichel that runs at right angles to the Cloitre Saint Merri that borders the west side of the Church of Saint Merri in Paris. Across rue de Brisemichel to the north was the enormous establishment that later became the Hotel de Roannez. But in 1635, it was merely the home of Henri Gouffier, Marquis de Boisy, and his wife, Marie Hennequin. They had three children: Marguerite-Henriette age nine, Artus eight, and Charlotte two. The Pascals also had three children: Gilberte fifteen, Blaise twelve, and Jacqueline nine. The two families lived in close neighborly relations for four years, 1635–1639, during which time the children became close friends. In 1650, Marguerite-Henriette Gouffier at age twenty-four became a nun at Notre Dame de Soissons, and in 1641 Gilberte Pascal at age twenty-one married her cousin, Florin Périer. These two oldest girls play little role in the following story. Then in 1639, Étienne Pascal was appointed commissioner to impose and collect taxes in upper Normandy, so the family moved to Rouen. All this is fact.

Blaise Pascal's biographers often say that during the four years the Pascal and Gouffier families were neighbors in Paris, Blaise, four years older than Artus and ten years older than Charlotte, dominated the two younger Gouffier children. And in 1656 when Charlotte was twenty-one, as her counselor, in fact, almost her spiritual advisor, Blaise encouraged her to enter the Port-Royal monastery with the goal of becoming a nun. Many of Blaise Pascal's biographers presume or surmise some level of romantic interest between Blaise and Charlotte, which the amorous couple is said to have overcome by their religious piety. This is fiction, both the romance between the two and the dominant influence of Blaise on Charlotte.

Then there is Artus Gouffier. Artus Gouffier became the Marquis de Boisy at the age of twelve when his father died in 1639, duc de Roannez at age fifteen when his grandfather died in 1642. In 1644 at age seventeen he graduated from the Academie de Memon. Thereafter he was at the Court of Louis XIV, where

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* Virtually all the factual material in this essay is from Jean Mesnard's monumental work: Mesnard, Jean. *Pascal et les Roannez*. Paris: Desclée, De Brouwer, 1965.

he danced in Court ballets several times between 1645 and 1651. In the field (for of course the duc was raised to be a soldier), he was Aide de Camp, and then at age twenty when he was allowed to administer his own affairs, he led troops into battle with great success. In 1648 at the age of twenty-one he was a favorite of Cardinal Mazarin, First Minister of the Queen Mother (of Louis XIV), Anne of Austria. Maziran promoted the duc to Maréchal de Camp, the first grade of general officer in the army. As the duc de Roannez, duc and pair, Artus had a degree of royalty at the level of the king. He was a loyal and assiduous courtier and soldier who fought on the side of the Court against the Fronde, the abortive revolt of some of the other duc and pairs of the realm. Then in 1651, at the age of twenty-four, the duc de Roannez bought the government of Poitou, which was close to the homelands of his mother and father. He bought it from La Rochefoucald for 300,000 *livres*, of which Louis XIV gave him 100,000 *livres* as a gift). He then withdrew from the military, and slowly over the years withdrew from all but the most important and essential Court affairs, so much so that he fell out of favor with Louis XIV.

The duc's interests had turned to administrating the government of Poitou, engineering, and the invention of machines, particularly having to do with transportation and the drainage of marshes. This much is fact.

But it is also said by Pascal's biographers—all of whom so far as I can tell are Catholic Christian believers—that the Duc's withdrawal from the Court and the military was not a mere change of interests, but rather the result of his conversion to devout Christianity (of course he was already a Christian), that it was a religious retreat from the world counseled by, modeled after, and inspired by Blaise Pascal, and this is fiction.

The attempt to support this pious view of the relationship between Pascal and the duc de Roannez is a major theme in the two-volume study running to 1,117 large pages of small print by the great French Pascal scholar Jean Mesnard, entitled *Pascal et les Roannez* published in 1965. A primary difficulty with this thesis is that Mesnard himself shows that there is no evidence whatsoever that Blaise Pascal and Artus Gouffier had any contact during the ten years between 1641 and 1651 after the Pascals moved away from the neighborhood of the Hotel de Roannez, and Mesnard documents just how few the occasions could have been for their meeting during those years, years during which the boy Artus became a man, a soldier, and a Court favorite. Mesnard also remarks on how vast was the social gap between Pascal and the duc de Roannez, bridged when they were children and neighbors, but barricaded by wealth, class distinction, and convention after the Pascals moved away in 1639 when Artus Gouffier was 12 years old and had just become the Marquis de Boisy.

After finishing my biography of Descartes, I started working on a book on Descartes and Pascal.[1] Here is my thesis: historians are quite wrong about the religious orientations of the two men. Pascal is presented as a Christian believer on the level of Augustine, while there are entire books written to prove that Descartes was a secret atheist. But the fact is, I argue, that Descartes is the true believer and Pascal is at least an agnostic and at worst an unbeliever. The proof is that Descartes provided a proof for the existence of God, declared his belief, never thereafter doubted it, and said: now let's do physics. His dying words were an evaluation of his medical condition. After a severe bout of coughing, he said to his valet, "Ah, my dear Schlüter, this time I must depart." He had pneumonia.

Pascal, on the other hand, gave up publishing in mathematics and physics as being frivolous distractions from devotion, although he continued guiltily working in them, carefully wrote them up, and this work was published after his death. And far from being assured about his salvation, Pascal suffered throughout his adult life from a fearful, pathological, sacrilegious doubt about whether or not he was saved. *His* dying words were "May God never forsake me!"

I have heard that there is more written about Pascal than about any other French philosopher including Descartes. And Pascal continues to be written about and revered as a believer as Descartes never was and never will be. Why?

The reason is Pascal's Pensées. They established him as a passionate believer. But also, along with his *Provincial Letters*, they show him to be a great stylist, one of the greatest in all of French literature. His aphorisms inspired Nietzsche and his *Provincial Letters* blew the stuffiness out of French prose forever. Well, maybe not forever. But in any event, after reading an enormous amount about Pascal, I am convinced that the true source of his attraction is his religious agony. As with Kierkegaard, there is nothing like agony combined with a brilliant style to attract the admiration of true believers. And most of those who write on Pascal are, if not priests, at least true believers in the salvation promised by the Savior, Jesus Christ.

Here is the set of mind in which I read books about Pascal. A number of years ago I published a paper entitled "Shadow History in Philosophy."[2] My thesis is that an enormous amount of philosophy is populated by shadow views of the real or true positions of influential philosophers. Thus we have Plato on

1   Watson, Richard A. *Cogito, ergo sum: the life of René Descartes*. Boston: David R. Godine, 2007.

2   Watson, Richard A. "Shadow History in Philosophy." *Journal of the History of Philosophy* Vol. 31, No. 1 (1993), pp. 95–109.

Socrates, Aristotle on Plato, and jumping ahead, Bertrand Russell on Western Philosophy and Richard Rorty on Modern Philosophy. The wonderful thing about the shadow figures these writers project is that these figures' philosophical views are shown to lead logically and inexorably to the positions of the philosophers writing about them. Plato's exposition of the views of Socrates lead to those of Plato, Aristotle's exposition of the views of Plato lead to those of Aristotle, and so on. In "Shadow History" I argue that in the literature on the great figures in Western philosophy, you are seldom going to find an unprejudiced view of the philosophers being presented. But my purpose is not to attack the shadows, but rather to argue that these shadow figures have more influence on the development of philosophy than any accurate or true exposition of the philosophers from whom they are drawn.

Pascal the pious, then, as presented by pious interpreters, is deeply ingrained in the Pascal literature and is greatly influential. So be it and let it be. But this does raise the question for historians of philosophy: to what extent is this popular, pious view of Pascal in the literature distorted or attenuated by the beliefs and agendas, hopes and fears, piety and proselytizing of the authors of that literature?

Here is the problem: true believers, like Tertulian, can believe that snow is black, or argue like Kierkegaard that because the notion that Jesus Christ is my Savior is the craziest thing he ever heard of, he believes it. What strikes me about Pascal is the pathetic fact of his attempt to overcome his doubt. He was not a true believer. He saw serious logical problems about God's creating Adam, Adam's sin, the Fall of Man, evil, and particularly about predestination. His last words "May God never forsake me!" so obviously echo Christ's cry upon the cross—My God, my God, why has thou forsaken me!—that some Pascal scholar must have commented on it, but I've never seen it mentioned. Perhaps it is too embarrassing.

On the other hand, Pascal's younger sister Jacqueline was truly devout. She became a nun, Sister Sainte-Euphémie, at Port-Royal. He opposed this contract through her time as a novice, and was not truly reconciled to it until his mystical Night of Fire of his so-called second conversion. At first he seemed to object because after his father died in 1651, Jacqueline was his companion and took care of household management of the dwelling they shared. And so he seriously balked when Jacqueline wanted to give to Port-Royal the money promised for her dowry. Their father had had enough money to retire to Paris with his family so he could enjoy the company of mathematicians and scientists, but he did not leave enough money that Blaise and Jacqueline did not have to watch expenditures carefully. Gilberte, the eldest, was married, so she was taken care of. Jacqueline, the youngest, had been promised a dowry that

Blaise thought was excessive. If she became a nun, that money could rescind to Blaise, who could use it. Of course it would go to her husband if she got married. In fact she had one good offer, which Pascal successfully counseled her against. And since she was not getting married, why give that money to the monastery? She was marrying Christ, for—goodness—sakes, not the monastery. Pascal resisted, and was extremely ungracious about it, but finally he gave in. The money went to Port-Royal.

What could Pascal do to increase his income? He tried to market the arithmetic machine he had invented. It was not a true computer as some have said, but one could use it to add, subtract, divide, and multiply. It is said that he invented it to help his father in the calculating and collecting of taxes, but it is doubtful that his father had to do much with any of that scut work himself. You could hire young men cheaply to add and subtract.

The truth about Pascal's invention of the arithmetic machine—he called it the *Pascaline*, his little baby—is simply that the young man who worked out Euclid's thirty-second theorem himself by drawing lines on the floor when he was twelve, who published innovative work on conics when he was sixteen, who later developed foundations for probability for his two friends Méreé and Mitton, and who established the physical foundations of hydraulics and hydrostatics, was a mathematical and scientific genius. He also needed some way to increase his income. Well, why didn't he, with his knowledge of probability, do as Descartes had, make some money gambling with his friends Mitton and Méré? In fact, he probably did. There is no evidence that he disapproved of gambling, and he never disavowed his friend Mitton who was known as a libertine. The only evidence that Pascal ever gambled, however, is his *infini/ rien* argument for Christian belief, but even that is not much of a gamble if one accepts Pascal's claim that one has nothing to lose. Jesus threw the moneychangers out of the temple, but he did not condemn them, he just advised poverty as a way to salvation. Pascal tried that for a while. He even neglected his diet and personal hygiene, but that did not last long after Jacqueline told him he stank and made him take a bath.

In any event, Pascal was not one to neglect the amenities of civilized life for very long. He needed money, so he contracted to have examples of the arithmetic machine made, and he wrote fliers advertising them for sale. He wrote a famous letter to Queen Christina of Sweden seeking her endorsement. She replied that it sounded fascinating, but offered no encouragement in the way of money. This enterprise came to nothing, primarily because the arithmetic machines were difficult to use and too expensive to manufacture. But there were fifty examples produced, and there is one displayed in the window of a bank in Paris. I have often stood looking at it, thinking of Pascal.

If Descartes resisted Jacqueline's entering Port-Royal, he did not oppose, but rather encouraged with his letters, that course for Charlotte Gouffier, the duc de Roannez's sister. Nor did the duc ever oppose it. And the duc let Charlotte's dowry money go to Port-Royal, although later when Charlotte changed her mind and got married, her husband, the Compte de La Feuillade retrieved it from port-Royal. More about that below. No, Pascal wrote a series of pious letters to Charlotte, parts of nine of which have survived.

Pascal underwent two conversions, well-documented in the Pascal literature. The first was in 1646 when he was twenty-three. His father had dislocated his hip badly, and two specialists in those matters, the Deschamps brothers, lived with the family for three months to help him along. The Deschamps were former hellions and duelers who were converts to the views of Saint-Cyran, who professed the austere doctrines of Augustine on the Fall of Man, the need of God's grace to overcome sin, impenetrable predestination, and solemn religious seriousness in daily life. They converted Pascal to this view and he in turn converted his father and two sisters. But Pascal never became a devout in the sense of being someone who tried to soak all his behavior in piety and/or retreat from the world of ordinary human affairs. And after a few months, the fever of this first conversion generally dissipated and Pascal entered his so-called worldly period, during which he became a part of the duc de Roannez's circle and hob-nobbed with the gamblers Méré and Mitton.

Pascal's second conversion came after a period of despair brought on by his various ailments—violent headaches, nausea, severe stomach cramps, inability to swallow, cramps in his legs so painful that he could not walk. He also supposedly had a phobia about looking down to his left, for fear of glimpsing the fires of hell, and so always sat with an empty chair on his left. Or so some commentators on Pascal say.[3] This sounds extreme, but if he did do this, it was probably because he was weak on his left side and had very poor balance. Mesnard never mentions it.

Pascal's second conversion, and this is a serious one, came on the night of 23–24 November 1654 when he was thirty-five years old. This is his famous Night of Fire when he felt himself enveloped by the presence of God, that is, Jesus Christ. What is striking is that his behavior, did change somewhat after the first conversion, that is, he became a pious boor. This did not in fact last very long, a few months. But his behavior after his second conversion changed barely at all. The intensity of his second conversion became known only after

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3   Adamson, Donald. *Blaise Pascal: mathematician, physicist, and thinker about God*. New York: St. Martin's, 1995, p. 15.

his death when the record of the experience he kept sewn in his shirt was found. This piece of paper contains this passage:

> FIRE.
> GOD of Abraham, GOD of Isaac, GOD of Jacob.
> Not of the philosophers and intellectuals.
> Certitude, certitude, feeling, joy, peace.
> (*God of Jesus-Christ.*)
> God of Jesus-Christ.

Despite this revelation, the second conversion did not mitigate Pascal's Augustinian uncertainty about salvation preached by Saint-Cyran, for he continues:

> My GOD, will you leave me?
> May I not be separated from him eternally.[4]

Soon after his second conversion, about which he may have told his sister Jacqueline, but maybe no one else, he did go into a retreat at Port-Royal for about three weeks. This rest-stop on the course of life's way was not unusual for a man of his station. He participated in morning devotions, but not in the afternoon, which he spent with his own affairs. This isolation soon got tiresome, and he returned to Paris. Other than that brief fling at ostentatious piety, he did not change his way of life. If anything, he became more worldly. Just two years after his Night of Fire, he rallied to the defense of Port-Royal by writing and publishing anonymously from 27 January 1656 to 24 March 1657 eighteen brilliant, satirical, provocative, stinging *Provincial Letters* attacking the Jesuits and defending the Jansenists. He had notes for two more that he did not write.

I like titles that define their subjects. Thus the title in my book of the section on Pascal is Misery. (Just for the record, the section on Descartes is Concupiscence, Pascal's term of scorn for enjoying the pleasures of this world.) Most writers on Pascal would have said the motif of Pascal's life is piety. But Pascal was not pious. And although he continually insisted that one must love god, he did not love God. He was terrified of God. The motif of his life is misery. And in fact he was in both extreme physical and extreme mental misery all his life. His afflictions led him to write his misanthropic, self-mortifying "Prayer to ask God for the Good Use of Sickness" written sometime during the last four

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4   Pascal, Blaise. *Œuvres Complètes.* Edited by Louis Lafuma. Paris: Editions du Seuil, 1963, p. 618.

years of his life. And here again, as in his last words, Pascal compares himself
to Christ:

> O my Savior, if my body has in common with yours that it suffers because
> of my offenses, my soul is also in common with yours, that it is in sorrow
> for the same offences, and thus that I suffer with you, and like you, in my
> body and my soul for the sins I have committed.[5]

Of course the imitation of Christ is urged upon all devout Christians, and for
some, like Pascal and Mother Teresa, to the horrific depths of the dark night of
the soul.

My method in this paper is not to harp on how Mesnard's picture show of the
pious Pascal is distorted by the lens of piety through which not just Mesnard,
but virtually all Pascal scholars, peer back at Pascal. My aim is simply to project
that shadow in all its distortion, and hope you will catch on. But here I cannot
refrain from remarking that this three-movement picture show of a mild first
conversion, a worldly period, and then a deep second conversion—which all
Pascal scholars project on the wall of the cave they inhabit—is shadow play.

To continue. Mesnand's basic thesis, the pivot on which he turns the life of
the duc de Roannez, is that after his first conversion, Pascal converted the duc,
who as a result gave up the military and withdrew from the Court. Mesnard's
evidence for this is that the duc gave up the military and withdrew from the
Court. In fact, the duc apparently did not dance in any more court ballets, and
he merely reduced his participation in Court affairs. But he did give up his
life as a soldier, and there had to be some reason for that, didn't there? What
better reason than that the duc's friendship with Pascal led to deep conversa-
tions about religion that led in turn to the duc's conversion and retreat from
the world? After all, weren't Pascal's *Pensées* written as preliminary to a never-
finished book to convert unbelievers?

Mesnard is very confident about his depiction of the inner life of Pascal
based on the *Pensées*, but remember that Pascal also wrote the wildly funny,
worldly, and sarcastic *Provinciales*. But there are also the letters to Mademoiselle
Roannez from Pascal in which he supports her determination to become a nun,
although after having sworn to chastity, and after Pascal died, she got married
and had children, one of whom is very interesting. I'll get that.

And the inner life of the duc de Roannez? Unfortunately, the duc was not
a man who wrote down his thoughts. A blank wall blocks the inner life of the

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5   Ibid., p. 364.

duc, so Mesnard provides an inner life for the duc that befits the close friend and business associate of Blaise Pascal.

So who was the duc de Roannez?

The duc de Roannez was one of the great pivotal actors of the 17th century. Mesnard often refers to the duc de Roannez, as a man of action, and here he is right. Artus Gouffier became the duc de Roannez, remember, when he was fifteen years old. His schooling finished by the time he was seventeen, in charge of a troop of soldiers at eighteen, a Marshall of France at twenty two. And he danced in court ballets at least until 1651, when he was twenty-four. Need I remark that fetching young women of the Court of Louis XIV danced in those ballets too? This was a man who started out in life like a house afire.

Mesnard argues that the association from 1635 to 1639 of Artus Gouffier, when he was a boy of eight to twelve, with Blaise Pascal when he was twelve to sixteen, resulted in Pascal's moral dominance over the duc de Roannez in 1651 when the duc was twenty-four years old (and Pascal twenty-eight) even though there had been virtually no commerce between them for a period of a dozen years. They got together again (Mesnard speculates) because of the Duc's interest in Pascal's scientific work. And then Pascal's piety led to the Duc's conversion and religious retreat.

I don't say that it isn't possible. And the only evidence that Mesnard himself is somewhat uneasy about this fable is that although the duc lived thirty-five years after the death of Pascal, when Mesnard describes the Duc's many accomplishments during those years, Mesnard always tacks on at the end that this or that enterprise was something Pascal had also been interested in. Mesland also says that all these business and engineering affairs were in the interests of helping poor people, and were really undertaken for the benefit of mankind, and not undertaken simply because the duc was a brilliant engineer, inventor, and master entrepreneur. Well, when Pascal died, he left half his earnings from the carriages of *cinq sous* enterprise (more about that below) to the poor. When the duc died, he left a number of behests, the only one that qualifies as humanitarian being 300 *livres* for Madame de Fontpertius, whom, in a book of hundreds of pages of genealogies, Mesnard identifies only as a friend of the great Antoine Arnauld, who in turn had been (he was dead by then) a friend of the duc.

But to the chase. The duc de Roannez was one of the great entrepreneurs of the 17th century. In the time of Henri IV (forget Louis XIV, the greatest king of France was Henri IV), a number of public works and enterprises were undertaken. Roads, transport from region to region, and companies for investment in the Americas and the Far East on the model of the Dutch East Indies Company. Never mind that some of these endeavors were spectacular failures, France was

on its way to modernity. In this tradition, the duc de Roannez was a giant. His first great enterprise was the draining of marshes. He began in his own Poitou, and then organized and established companies to drain marshes and lakes throughout central France. He was both entrepreneur and CEO. He organized and supervised the work, and most important, he solicited investors to finance the projects and he put together corporations to manage them. He brought in engineers and workers from Holland to drain the marshes. Mesnard devotes perhaps a hundred pages to the genealogies and financial involvements of the investors, the details of how to drain a marsh, and of the pumps and windmills, one of which the duc invented on a Chinese model.

But this is just the beginning. The duc was a self-made engineer and inventor. His interest in science is what, Mesnard says, linked him with Pascal. In fact, his childhood worship of the older boy, a prodigy in mathematics and science, inspired the duc all his life. Well, I'm sure he thought fondly of Pascal. But far from leading to the Duc's retreat—religious retreat, no less—from the world, his association with Pascal (Menard says) led to the Duc's great series of engineering and entrepreneurial inventions.

Now to the carriages of *cinq sous*. Standard history is that Pascal originated this idea. Mesnard argues persuasively that Pascal did write the placards for the first three routes in Paris. But did Pascal also map out the routes? It seems more likely that the duc and some of the investors in the enterprise made up the routes, given that they were more worldly and experienced than Pascal about where people might want to hire a ride. And five cents may not seem like much, but in fact that was equivalent to about fifteen dollars today. The carriages were not for the common man. And they were a tremendous success. Seven routes, a carriage every hour, and always packed. Even Louis XIV went to look at them, but there is no record that he ever rode in one.

For the carriages of *cinq sous*, the duc introduced a shocking, spectacular innovation: mules. Mules? This land was horse land. Nobody who was anybody had a mule. Anybody who was somebody had a horse, and the higher the quality of the horse, the higher the status of the man. But mules? Mules are stronger than horses, they are not high strung, they do not shy away when a lady flutters her handkerchief. The use of mules for the carriages of *cinq sous* is an inspiration that would come only to someone who had advanced beyond the prejudices and gentlemanly ideals of his own time.

The carriages of *cinq sous* were a magnificent success, and had Pascal lived to enjoy them, the profits from his modest investment (one-twelfth) in the company would have provided him with the extra money he wanted for his needs. The conception, financing, development, and management of the carriages of *cinq sous* was a quantum leap forward in public transportation, the

first cheap ride in any city in the world (relatively—but it was a lot cheaper than renting or buying a carriage), soon copied in Holland and throughout Europe. Mesnard—and everyone—gives Pascal the credit for the carriages of *cinq sous*. I doubt it.

But what followed was all from the duc, if for no other reason than that Pascal died on 4 October 1661 at the age of thirty-nine. The duc, as I remark above, died thirty-five years later on 4 October 1696 while he was at work out on the marshes. Mesnard says the duc died in frightful solitude, in the presence only of some of his workmen.

Poor man.

Almost immediately after the success of the rides for *cinq sous*, the duc invented a one-man chariot on suspended springs, and solicited investors to form a company to build and rent them by the hour. He also designed chariots for two and four people, also on suspended springs. These vehicles were sensations, particularly in the Court, where courtesans used them to follow the king from place to place. Louis XIV, despite his continued dislike of the duc, even rode in one.

While transforming transportation in Paris and France, the duc continued to organize investors to drain marshes. Which enterprise, no doubt, led him to his next set of projects: the improvement and transformation of transport on the river Seine. Navigation downstream to the sea was open, but upstream there were problems with shallows. The duc first made improvements on the barges, but the biggest enterprise—one not finished in his lifetime—was the digging of upstream canals. The usual method of taking a barge upstream was pulling it with horses. The duc invented cogwheel transport, where a barge was floated onto a platform that in turn was ratcheted forward by a cogwheel (turned by mules, I'll bet). It is not easy to describe, but never mind, it was not one of the Duc's most successful inventions. Not to forget. Mesnard mentions that Pascal was interested in river transport, too, not that there is any record of this.

The duc, Mesnard says, obviously was very religious (and thus in retreat) because so many of his friends were friends of Port-Royale. He tried unsuccessfully to help get Arnauld permission to return to Paris after Louis XIV had banned him in 1684. Many of those who invested in his enterprises were friends of Port-Royal, and numbers of his friends had also been friends of Pascal.

But Mesnard's main argument for the Duc's piety and religious retreat is that when his sister Mademoiselle Roannez married the Comte de La Feuillade in 1667, the duc gave him not only the dowry money Port-Royal had returned, but also the huge Hotel de Roannez in Paris. And where did the duc live when he was in Paris thereafter? In rooms in a block of apartments owned by the

Oratory where other religious men including Malebranche—also lodged. Later, so he could entertain his friends and provide them with rooms to stay in when they came to Paris, the duc moved to a much larger establishment, also owned by the Oratory. So lots of his friends were religious, and numbers of them, like Pascal, were friends and associates of Port-Royal. I don't say that the duc was not religious. I just point out that the only evidence of it is that he was a good friend of Pascal and of Pascal's religious friends, many of whom invested in the Duc's enterprises. Well, where else do you solicit, if not among your friends?

The Duc's immediate ancestors were religious, but theirs was a religion of politics, not of deep devotion. His mother was an active conspirator in the ultramontane party of Anne of Austria. His paternal grandfather, Louis Gouffier, was a great admirer of Henri IV, particularly of Henri IV's amorous exploits, which Louis Gouffier emulated by siring at least two bastards himself. Of Louis XIII, Louis Gouffier said that he must be a bastard, he couldn't possibly be the son of Henri IV. For proof, when Louis XIII was alone with the knockout courtesan, Mademoiselle de Hautefort, he could only babble about the Evangel and Sacred Scripture. Not that Louis Gouffier was not himself a true believer. Once when a priest told him he would be punished by God for murder, Louis Gouffier replied instantly that on the contrary, murder was a matter not between him and God, but between him and his confessor. This attitude toward the sins of the noble class is just what Pascal, the Jansenists, and Port-Royal deplored about the Jesuits.

The Comte de La Feuillade who married Mademoiselle Roannez was impelled in part by the fact that he was marrying up. But within a week of marrying Mademoiselle de Roannez, the Count had developed an intense, lifelong hatred of the duc de Roannez, for the duc had duped him. There were enormous expenses in the upkeep of the Hotel de Roannez, and the gift came with debts amounting to hundreds of thousands of *livres*. Mademoiselle Roannez herself, now a frequenter of the Court with all the expenses involved in that (I'll bet she never took a ride on the carriages of *cinq sous* in her life) was a very expensive acquisition. The Duc's great generosity in giving up the Hotel de Roannez and renting a modest dwelling for himself for a few hundred *livres* a year was one of the best financial deals of his life, and showed the Comte de La Feuillade to be an *idiot des affaires*.

This by no means altered Louis XIV's high estimate of the Count nor his low estimate of the duc. Ignorance or even stupidity in business matters was a star in the crown of a courtier. Great debts were expected, and this, in fact, is one reason the duc managed all his life to prosper despite sometimes being in debt to the extent of nearly a million *livres*. As for the Court, the Duc's acumen in

des affairs, his involvement in raising, investing, and making money with his engineering projects was one reason that Louis XIV scorned him. The Court did not make money. The Court spent money.

I end on a note that I have never seen struck in the Pascal literature. Did Pascal have a homoerotic attraction to the duc de Roannez? Did the duc, who never married, have homosexual leanings himself? Why did this matter come up with Descartes, who was furious when the Dutch Protestant preacher Gilbertus Voetius called him another Vannini who had been burned at the stake as much or more for homosexual acts as for heretical theology, but never with Pascal?

I think the correct answer is that neither Pascal nor the duc de Roannez ever had or ever gave any indication of having homosexual leanings, nor, for that matter, did Descartes. True, none of them got married. Pascal's health—religious, mental, and physical—forbade it for him. But what about the Duc?

The duc did contemplate marriage seriously at one very low financial point in his life. In 1655 when he was twenty-six years old, the duc de Roannez was the only eligible duc and pair bachelor in France. Many handsome offers were made to him, the most spectacular by the family of the richest heiress in France, Antoinette-Louise de Mesmes, fifteen years old. Of course the family was only of the noblesse de robe (lawyers), but what is money for if not to buy your way up? Mesnard says that she was not bad looking (there is a portrait of her, but, alas, none of the duc de Roannez). She was also short. Short in 17th century France meant *really* short. Substantially less than five feet. But more alarming, her younger sister was a dwarf. Would you want to take a chance on having children with someone from a family that has those genes? And now to rush to conclusion. The duc declined that extremely rich offer in 1655, and subsequently never married. But in 1667, his sister, Mademoiselle de Roannez, booting her vow of chastity, did marry, and Mesnard remarks without comment that her second daughter was a dwarf. A dwarf? The duc's sister gave birth to a dwarf? Could the duc have known of dwarves in his ancestry? Menard does not say. But maybe that is why the fabulously desirable duc de Roannez never married, and not, as Jean Mesnard says, because of deep piety and religious retreat from the world after having been converted by his childhood friend, Blaise Pascal.

PART 1

Gods

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What is Ancient in French Cartesianism?

Tad M. Schmaltz

> For as far as principles are concerned I accept only those that in the
> past have always been common ground among all philosophers without
> exception, and that are therefore the most ancient of all.
>
> *Descartes to Dinet*, AT 7:580[1]

1 Introduction

In the background of the various receptions of Descartes toward the end of the
seventeenth century is the famous dispute—triggered by a 1687 speech to the
Académie française—that became known as "the quarrel of the ancients and
moderns."[2] Even prior to the onset of this quarrel, however, there was already
a division between those who emphasized the value of the learning of antiq-
uity and those who insisted on the greater value of a more modern perspec-
tive. The former point of view is represented, for instance, by Anna Maria van
Schurman, who wrote in a 1644 letter to Princess Elisabeth of Bohemia:

> It is true that I have a high regard for the Scholastic Doctors. . . . [I]t is not
> strange that they have arrived at such a high degree of perfection, inas-
> much as they have not scorned the legacy of their predecessors or the
> heritage of all past centuries.[3]

This remark is a reflection of the emphasis on the part of the defenders of the
ancients of a need for scholarly attention to past texts in their original lan-
guage and historical context.

In contrast are the remarks of Elisabeth herself in correspondence with
Descartes. She writes to the French philosopher in 1645 that

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1   AT = Charles Adam and Paul Tannery, eds., *Œuvres de Descartes*, 11 vols. Paris: J. Vrin, 1964–74.

2   Charles Perrault triggered the quarrel when he presented to the Académie his poem, *Le Siècle
de Louis le Grand*, which asserts the superiority of the age of the Sun King to the Augustan
age. For more on the quarrel and its history, see Hippolyte Rigault, *Histoire de la querelle des
anciens et modernes*. New York: Franklin, 1965.

3   *To Elisabeth*, 26 Jan. 1644, in Anna Maria van Schurman, *Whether a Christian woman should
be educated and other writings from her intellectual circle*, ed. and trans. J.L. Irwin, Chicago:
University of Chicago Press, 1998, pp. 66–67.

> if we measured the scope of the human mind by the example of the com-
> mon people, it would be of very small extension, because most people
> use their capacity for thought only in matters regarding the senses. Even
> among people who apply themselves to study, there are few who use any-
> thing but their memory or who have the truth as the goal of their labor.
> (*Elisabeth to Descartes*, 28 Oct. 1645, AT 4:320)

The denigration here of people who "apply themselves to study" through use
of memory and who do not use their own thought in the search for truth is
more indicative of a modern turn away from antiquarian scholarship in the
work of the defenders of the moderns. Such an attitude is reflected in the work
of Elisabeth's correspondent, Descartes, who seems to have actually crossed
swords with Van Schurman on this issue at one point. The story has it that
she was insulted by his remark to her that it was a waste of time to read the
Bible in Hebrew. Whereas Van Schurman upheld the value of study of the past,
Elisabeth was on Descartes's side in favoring a use of thought unencumbered
by tradition.[4]

But though we may seem to have in Descartes a straightforward connec-
tion between modernity and a disdain for the ancients, there is in fact a more
complex attitude in Cartesianism toward the past. I undertake a consideration
of the complications here, starting with a discussion of Descartes's own some-
what ambivalent stance with regard to past tradition. One can indeed find in
his writings the sort of attitude toward historical study reflected in his pur-
ported encounter with Van Schurman. However, there also is some effort on
his part to link his natural philosophy to the views of Aristotle. Though there
also is reason to question the depth of this connection, there are more serious
attempts among Descartes's later followers to connect Cartesianism to ancient
philosophical traditions.

In order to illustrate this last point, I consider two different forms of
post-Descartes Cartesianism in early modern France. I begin with the views
of Nicolas Malebranche. There are in his writings some remarks concern-
ing historical scholarship that are far more derogatory than anything found
in Descartes. In stimulating recent work, Tom Lennon has shown that these
remarks were the primary source of the anti-Cartesianism of Pierre-Daniel
Huet, a French erudite who was one of the leading defenders of the ancients

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4   A friend of Van Schurman's, Pierre Yvon, related that this exchange took place in 1649,
    when Descartes stopped in Utrecht on his way to take up his position at the court of Queen
    Christine of Sweden. Yvon noted that on the basis of this interaction, Van Schurman
    "broke off all ties with him and refused him all access to her." See Van Schurman, *Christian
    Woman*, 7.

in the early modern quarrel with the moderns.[5] Even so, there also was a concern in Malebranche to connect his modern system to ancient Platonism, particularly as transformed in the work of Augustine. Prompted by the criticisms of his Cartesian opponent, Antoine Arnauld, Malebranche was obliged to defend his form of Platonized Cartesianism by engaging in an exegesis of historical texts. However, the Platonism that Malebranche endorsed requires a significant revision of Descartes's system insofar as it is incompatible with his famous (or infamous) doctrine that God has freely created the eternal truths (which I call, for short, the created truths doctrine).

I consider a second form of historicized Cartesianism in the writings of an opponent of both Malebranche and Huet, namely, the French Cartesian Pierre-Sylvain Regis. We do not find in Regis the sort of vitriolic condemnation of historical scholarship that is present in Descartes and especially in Malebranche. What we do find, in common with Descartes and Malebranche, is an attempt to link Cartesianism to an ancient philosophical tradition. In contrast to Malebranche, however, it is the Aristotelian tradition that Regis highlights. And in contrast to Descartes, the link to Aristotle can escape the charge of superficiality given its relevance not only to Regis's acceptance of Descartes's created truths doctrine, but also to his rejection of an account of pure intellect common to Descartes and Malebranche. I conclude by relating the division I find in later French Cartesianism to Tom Lennon's account of the seventeenth-century instantiation of what Plato called the "interminable battle" between "the gods," who are friends of the Forms, and "the giants," who defend the primacy of the material world.

2   Descartes on the Ancients

There is a familiar understanding of Descartes as an epistemological individualist, one who calls for a radical turn away from teachings of the past in order

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5 "Huet, Malebranche and the Birth of Skepticism," in *The Return of Scepticism from Hobbes and Descartes to Bayle*, ed. G. Paganini, Dordrecht: Kluwer, 2003, pp. 149–65. In a 1674 speech on occasion of his induction to the Academie française, Huet bemoaned the views of those who neglect antiquity and impugn the value of memory (*Discours pronouncez à k'Académie francaise le XIII Aoust LXXIV*, 7). Lennon speculates that Huet was prompted to this criticism by his reading of Malebranche; as Lennon himself notes, however, it is uncertain what Huet had read of Malebranche's *Search after Truth* by the summer of 1674 ("Huet, Malebranche," pp. 156–57n.17). More certain is Lennon's claim that "if Malebranche's great work did not initiate Huet's negative view of Cartesianism, it at the very least confirmed that view" (ibid., p. 152). For more on Huet and the history of his relation to Cartesianism, see Lennon, *The Plain Truth: Descartes, Huet, and Skepticism*, Leiden-Boston: Brill, 2008, pp. 1–18.

to establish new truths through the private exercise of reason. And this is an understanding that Descartes's own words encourage. In the autobiographical remarks in his *Discourse on the Method*, for instance, he observed that as soon as he was able to free himself from his scholastic education, he "entirely abandoned the study of letters" and sought "no knowledge other than that which could be found in myself or else in the great book of the world" (AT 6:9). To be sure, he granted the value of learning the languages that allowed him to appreciate the charms of the histories and fables of the ancients. But he also warned that one who "is too curious about the practices of past ages usually remain quite ignorant of those of present" (AT 6:6–7). With regard to the sciences, he concluded that insofar as what the ancients say borrowed from philosophy, "nothing solid could be built on such shaky foundations" (AT 6:9).

This same metaphor is of course prominent in the *Meditations*, where the meditator begins by speaking of the need to demolish the edifice of his past system of beliefs about the world and to build new foundations for the sciences from scratch.[6] It is just this kind of talk that led critics to accuse Descartes of preferring his untested subjective opinions to what Van Schurman called the "heritage of all past centuries."

Occasionally Descartes attempted to stand this argument on its head by claiming that it is he who draws on the wisdom of the ancients and his critics who are preoccupied with novelty. Thus, in the passage from the letter to Dinet that I cited at the outset, Descartes writes that

> everything in peripatetic philosophy . . . is quite new, whereas everything in my philosophy is old. For as far as principles are concerned I accept only those that in the past have always been common ground among all philosophers without exception, and that are therefore the most ancient of all. . . . By contrast, the principles of the commonly accepted philosophy—at least at the time when they were invented by Aristotle and others—were quite new, and we should not suppose that they are any better now than they were then. (*Letter to Dinet*, AT 7:580)

Thus it is the ancients, in the form of Aristotle and his friends, who are new and the moderns, in the form of Descartes and all other right-thinking people, who are old.

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6   "I realized that it was necessary, once in life, to demolish everything and start again right from the foundations it I wanted to establish anything at all in the sciences that was stable and likely to last" (AT 7:17).

But though the remarks to Dinet denigrate the novel "inventions" of Aristotle, Descartes in fact attempted at times to ally himself with this ancient philosopher. Thus, he wrote in a 1644 letter to Jesuit Charlet, in an obvious attempt to garner favor from the Jesuits, that though people accuse him of novelty, "I do not use any principles that were not accepted by Aristotle and by all those who have ever concerned themselves with philosophy" (Oct 1644, AT 4:141). This same sort of bow to tradition is present in the *Principles of Philosophy*, which Descartes clearly intended for use in the Schools. In this text, he notes in the course of his explanation of the nature of the material world that "I have not employed any principle that was not accepted by Aristotle and all other philosophers of every age. So this philosophy is not new, but the oldest and most common of all" (*PP* IV.200, AT 8–1:323).

Descartes's account of the material world in the *Principles* does in fact have some significantly Aristotelian elements. For instance, the arguments there against atoms and the void are reminiscent of the critique of ancient atomism in the work of Aristotle and his scholastic followers. This sort of connection to Aristotle provided the impetus for later attempts in France to reconcile the new Cartesian account of the material world with the old Aristotelian system. Such attempts are reflected in the titles of such later Cartesian texts as Jacques Du Roure's 1653 *La physique expliquée suivant le sentiment des ancients et nouveaux philosophes, & principement Descartes* (*Physics Explained following the Opinion of the Old and New Philosophers, and Especially that of Descartes*), and René le Bossu's 1674 *Parallèle des principes de la physique d'Aristote & celle de René Des Cartes* (*Parallels between the Principles of the Physics of Aristotle and René Descartes*). And there are other examples of this sort of syncretism, which came to be known as *la philosophie novantique*.

Nevertheless, the purportedly Aristotelian elements of Descartes's system must be considered together with his famous remark to Mersenne that his *Meditations* contain "foundations for physics" that "destroy the principles of Aristotle" (28 Jan. 1641, AT 3:298). In light of this remark, it is significant that in his remarks to Dinet, Descartes emphasizes that the principles of the ancients are acceptable *only* insofar as they provide "common ground among all philosophers" who attend to the light of nature. It is difficult to take seriously Descartes's attempt to locate himself in the Aristotelian tradition.

Indeed, at one point Descartes indicates a fundamental respect in which Aristotle's views are inferior to those of his teacher, Plato.[7] In the Preface to the French edition of the *Principles* (1647), Descartes claims that Plato followed in

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7   Thanks to Tom Lennon for drawing my attention to this passage, and to Tom as well as José Maia Neto for discussion of it.

the footsteps of Socrates by admitting that he could not attain certainty, and contented himself with merely probable principles. Though Aristotle accepted these same principles, there is reason to think that he "was less candid" than his teacher insofar as he presented them "as true and certain" even though "it seems most unlikely that he in fact considered them to be so" (AT 9-1:5–6). Interestingly, this distinction between Plato and Aristotle does not concern their ontological dispute over the status of the Forms; indeed, Aristotle is said to have *adopted* Plato's principles.[8] Rather, the differences are primarily epistemological and even moral, with Plato as the honest skeptic who is satisfied with probability, and Aristotle as the insincere dogmatist who offers as completely certain principles he must know to be merely probable.

Despite offering this flattering portrait of Plato, however, Descartes does not advocate a return to Plato's probabilistic skepticism.[9] Instead, his advice is that we turn our back to the philosophy of the past, Platonic as well as Aristotelian, in order to make philosophical progress. Thus, his conclusion is that "among those who have studied whatever has been called philosophy up till now, those who have learnt the least are the most capable of learning true philosophy" (AT 9-1:9). So much, then, for what Van Schurman called "the heritage of all past centuries."

In the work of Descartes's successor, Malebranche, we find an even more emphatic denunciation of scholarship of ancient views. Nevertheless, Malebranche also attempted to connect his form of Cartesianism to the Platonic tradition, where the concern is not, as in Descartes's remarks in his preface to the *Principles*, with Plato's skepticism, but rather with a version of

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8   It is significant here (though perhaps not for Descartes) that there was a tradition during the medieval period, and going back to late antiquity, of reading Aristotle's philosophy as in fundamental harmony with the views of Plato.

9   To be sure, Descartes allows that such skepticism is useful with respect to probable truths concerning "the conduct of life" insofar as it leads us to accept such truths while still keeping open the option of revising them if "evident reason" requires us to do so. In contrast to the Platonic skeptic, however, Descartes assumes that the understanding can yield absolutely certain knowledge of true principles by means of "evident perceptions" (AT 9-1:7). Moreover, it is significant that in the *Meditations*, Descartes, in the role of the meditator, stresses that the skeptical cleansing of prejudice is to occur only "once in life" (*semel in vita*) (AT 7:17); in contrast, Plato's purported view would seem to involve a continuing resistance to any sort of dogmatic belief. But cf. the reading of Descartes as an "Academic skeptic" in Maia Neto, "Foucher's Academic Cartesianism," in *Cartesian Views: Papers presented to Richard A. Watson*, T. Lennon. Leiden: Brill, 2003, pp. 71–95; and the reading of him as a "methodological Academic skeptic" in Lennon, *The Plain Truth*, pp. 44–54, 242–44.

the Platonic theory of Forms that Malebranche offered precisely as an antidote to skepticism.

3   Malebranche's Platonic Cartesianism

In his masterwork, the *Search after Truth* (1674/75), Malebranche clearly takes the side of Descartes and the moderns against the ancients and their partisans. Thus he writes in this text that if those who scorn Descartes's philosophy knew "the means he used in his studies in order to prevent his mind's capacity from being divided up by objects other than those about which he wanted to discover the truth" as well as "all the advantages he had over the ancients through new discoveries, they would thereby acquire a prejudice on his behalf stronger and more reasonable than that of antiquity, which endorses Aristotle, Plato, and several others" (*ST* III-1.4, *OCM* 1:412).[10] Indeed, even more than Descartes, Malebranche denigrates scholarship of the past. Thus, in the fourth book of the *Search*, devoted to the errors of the imagination, Malebranche exhorts the virtuous to "condemn to the flames the pagan poets, the rabbis, certain historians, and a large number of authors who are responsible to the glory and erudition of certain learned men" (*ST* IV.6, *OCM* 2:53). He also attacks the "judgment of false scholars" who "spend their entire lives reading the rabbis [again!] and other corrupt books written in foreign, obscure languages by authors with neither taste nor intelligence," all with the goal of placing themselves "in a greater and more elevated position than those ignorant of them" (*ST* IV.7, *OCM* 2:58). In Malebranche, then, we have a clear counterpart of Elisabeth's attack on scholars who use only memory and neglect the search for truth.

Earlier in the *Search*, Malebranche allows that "matters of faith are learned only through tradition," and thus that it is of the utmost importance in theology to engage in a careful historical study of the views of the Church Fathers and Councils. "In matters of theology," Malebranche insists, "we should love antiquity, because we should love the truth and the truth is found in antiquity." He continues, however, by noting that in philosophy, "we ought to love novelty for the same reason we must always love the truth, search after it, and have an incessant curiosity for it." The ancients are not to be accorded any special authority in philosophy: "we judge them more ignorant than the new philosophers, since in our time the world is older by two thousand years, and has more experience than in the ages of Aristotle and Plato" (*ST* II-2.5, *OCM* 1:294).

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10   *ST* = *Search after Truth*, cited by book (-part) and chapter; *OCM* = André Robinet, ed., *Œuvres complètes de Malebranche*, 23 vols., Paris: Vrin, 1958–, cited by volume and page.

Malebranche's attack on historical scholarship provided the inspiration for the attack on Cartesianism in the work of Huet.[11] In his *Censura Philosophiae Cartesianae* (1689), Huet complained about those "followers of Descartes" who "have declared war not only on belles lettres, but also on abstruse scholarship." He mentions in particular the "monstrous and barbarous voice"— unmistakably that of Malebranche—that expresses the view "that it would be a small loss if everywhere everything of the pagan philosophers and poets were consumed by fire."[12] And if there are any doubts here concerning the connection to Malebranche, one need only consider Huet's criticism of "followers of Descartes" who "forbid the study of eastern languages and the reading of the rabbis, of whose great usefulness to the understanding of sacred scripture they are ignorant."[13] In Malebranche, then, Huet found the personification of a Cartesianism that, in the words of Van Schurman, "scorns the legacy of our predecessors and the heritage of all past centuries."

As in the case of Descartes, however, Malebranche did not consistently represent his system as a novelty detached from past thought. This is particularly evident in his famous polemic with Antoine Arnauld. In his initial response to Malebranche's *Search*, Arnauld focused on the view in that text that the ideas we perceive are "representative beings" in God. In contrast to this "new philosophy of ideas," as Arnauld called it, there is the old view—which Arnauld claimed to be common to Augustine and Descartes—that ideas are nothing distinct from representative modalities of our own soul. However, Malebranche offered the ironic retort that it was in fact that authority of Augustine "that gave me the desire to pursue *the new philosophy of ideas*" (*OCM* 6:79–80; original emphasis). In this same response he contrasted his view to "the totally new ideas of M. Arnauld" (*OCM* 6:97), and claimed in another response to Arnauld to have learned from Augustine that "intelligible extension and the shapes of the geometers that one cannot conceive without extension are eternal and immutable" and "that they can be perceived only in the sovereign truth that contains them" (*OCM* 9:931). Thus, the view that ideas are contained in an "intelligible

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11   See note 5.

12   Thomas M. Lennon, ed. and trans., *Pierre-Daniel Huet: Against Cartesian Philosophy*, New York: Humanity Books, 2003, p. 215.

13   Ibid., p. 216. See also Huet's critique of those who want to destroy scholarship so that "we might have that certain rule of truth that they dream of in the silence of their senses and passions (for they everywhere love to speak in this way), and that only Descartes's philosophy might flourish" (ibid.). In the preface to the *Search* Malebranche praises those who listen to God "in the silence of the senses and passions" (*OCM* 1:16).

extension" is old, whereas the claim that they are representative modalities of our soul is a novelty.

A large portion of the debate between Malebranche and Arnauld is devoted to a consideration of the proper interpretation of particular texts from Augustine. And here the point was not simply to discern what the natural light reveals to be true, but also to discover what is required to be true to Augustine. In urging that his account of ideas was in the Augustinian tradition, Malebranche was attempting to head off Arnauld's ultimate objection that this account is a philosophical novelty that introduces theological difficulties. Malebranche understood his account to be simply a version of the Platonic view in Saint Augustine (who surely was beyond theological reproach) that the objects of our knowledge of the material world are the archetypal ideas of bodies comprehended in God's own immutable and eternal intelligible extension.

There is a line of interpretation that takes Descartes to be in the Platonic tradition that runs through Augustine.[14] In light of this interpretation, it might seem that Malebranche's Platonic Cartesianism is at least in the spirit of Descartes's own views. The issue of Descartes's relation to Augustine is of course an important one, but I will need to set it aside here.[15] What I want to emphasize rather is that Malebranche's Augustinian Platonism conflicts with one important feature of Descartes's system, namely, his created truths doctrine. In a passage that Malebranche himself cites, and criticizes, at one point, Descartes claims in the Sixth Replies that

> it is repugnant that the will of God not be indifferent from eternity to all that has been made or will be made, since no good, or truth, or believing, or doing, or refraining from doing can be feigned [*fingi potest*], the idea of which is in the divine intellect prior to his will determining or making it to be so. I am not speaking here of temporal priority; there is not any priority of order, or nature, or "reasoned reason" [*ratione ratiocinata*],

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14   See, in particular, Stephen Menn, *Descartes and Augustine*. Cambridge: Cambridge University Press, 1998.

15   For the classic study of the relation between Cartesianism and Augustinianism, see Henri Gouhier, *Cartésianisme et Augustinisme au XVIIᵉ siècle*. Paris: Vrin, 1978. It is worth noting that when correspondents noted the affinities of his views to Augustine's, Descartes for the most part only mildly acknowledged the relation. At one point he even goes out of his way to emphasize that his use of the *cogito* argument to show that "this I which is thinking is an immaterial substance with no bodily element" differs significantly from Augustine's use of a similar argument to show "that there is a certain likeness of the Trinity in us" (*To Colvius*, 14 Nov. 1640, AT 3:247).

as it is called, such that this idea of good impels God to choose one thing rather than another. (AT 7:431–32)[16]

There is some question here whether Descartes intended even truths concerning God to fall under the scope of the claim that there is no truth in God's intellect prior to the determination of his will; I will return to this question presently. However, what is clearly incompatible with Malebranche's Platonism is the implication of Descartes's remarks that there are no archetypes in the divine intellect that serve to guide God in his act of creation.

Admittedly, one of Malebranche's first critics took him to be a partisan of Descartes's created truths doctrine. In a critique of the *Search* that appeared even before the second of the two-volume work was published, Simon Foucher finds an endorsement of this doctrine in Malebranche's reference to necessary truths that "have been fixed by the will of God, which is not subject to change" (*ST* 1.3, OCM 1:63). Foucher's objection to this characterization of necessary truths is that

> it is certain that [God] wills things that are subject to change when he determines creatures to exist or to cease to be, in the vicissitude of time; thus, if God had fixed these truths only for some centuries, his will would be no less immutable, just as it is no less when he produces everyday the admirable changes which constitute the beauty of the universe.[17]

Thus, according to Foucher, Malebranche is not entitled to derive the immutability of the truths from the immutability of the will that created them, and thus leaves open the possibility of changes in these truths even given divine immutability.

However, Malebranche made clear both in his initial response to Foucher and in subsequent writings that his Augustinian identification of ideas with immutable and eternal archetypes of objects in the divine intellect is incompatible with Descartes's created truths doctrine. Indeed, at one point Malebranche turned Foucher's objection to him against Descartes, asking rhetorically, with respect to Descartes's view that eternal truths depend on God's free volition: "Do we not clearly see that God could not have willed certain things for a certain time … given, as some would have it, that he was entirely free and indifferent in his willing?" (Ecl. X, OCM 3:132). For Malebranche, Descartes's created

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16   Malebranche cites this passage in the tenth of the *Eclairciessmens* appended to *ST*, at OCM 3:136).

17   Foucher, *Critique de la Recherche de la Verité*, New York: Johnson Reprint, 1969, p. 30.

truths doctrine can lead only to rampant skepticism. His Platonic alternative, drawn from Augustine, is that God cannot will contrary to the eternal truths because they are grounded in uncreated aspects of his own intellect. In contrast to the case of Descartes's invocation of Aristotle, Malebranche's appeals to the ancient authority of Augustine cannot be said to be merely incidental to his form of Cartesianism. And given the nature of his appeal to Augustine, this form of Cartesianism must be distinguished from the position that Descartes himself was concerned to defend.

4　Regis's Aristotelian Cartesianism

I have followed Lennon in identifying Malebranche as the source of Huet's animadversions against the barbarity of "the Cartesians." But when Huet referred at one point to "the Prince of the Cartesians" (for him, a term of abuse), he was referring not to Malebranche but rather to his French contemporary, the Cartesian Pierre-Sylvain Regis. In contrast to Malebranche, though, one cannot find in Regis an attack on historical scholarship. Indeed, in his final work, the 1704 *Use of Reason and Faith*, to which we will return, Regis begins with reflections on the history of the different uses of philosophy in Christian theology. Nonetheless, Huet's label is explained by the fact that Regis entered into a highly partisan attack of Huet's *Censura philosophiae cartesianae*, and was in fact one of Huet's most prominent Cartesian critics.[18]

But though Regis was in Huet's mind the primary representative of Cartesianism, he also was one of the principal opponents of Malebranche. In the course of his polemic with Malebranche during the 1690s, Regis argued against the Platonist account of ideas in the *Search* by defending the view that ideas of bodies are not distinct from our own perceptions of the material world. This line of attack of course recalls the views that Arnauld had offered earlier, and Regis's discussion in fact prompted Arnauld to revive his critique of Malebranche's account of ideas. Thus, for instance, speaking of Regis's claim that infinitely complex ideas can exist in a finite mind since they are infinite only *in representando*, not *in essendo*, Arnauld wrote to Malebranche in 1694: "you are not happy with this distinction; too bad for you."[19]

18　For more on the history of the relation between Huet and Regis, see my *Radical Cartesianism: The French Reception of Descartes*, New York-Cambridge: Cambridge University Press, 2002, §5.2; as well as Lennon, *The Plain Truth*, pp. 7–12.

19　*Œuvres de Messire Antoine Arnauld*, Brussels: Culture et civilization, 1967, pp. 40, 88–89.

What separates Regis from Arnauld, however, is the attempt of the former to offer an alternative account of ideas that explicitly appeals not only to Descartes's created truths doctrine, but also to the authority of Aristotle. Moreover, Regis offers an Aristotelian rejection of pure intellect that has no clear counterpart in Arnauld.

Let us consider first the issue of ideas. In his *Use of Reason*, Regis expresses his disagreements with Malebranche over this issue in terms of the old debate between Platonists and Aristotelians. He notes that Plato himself held that our knowledge of the material world derives from ideas distinct from such a world. Augustine put these ideas in God, as eternal reasons that guide creation, and later philosophers (most notably, Malebranche) went so far as to say that God has an "intelligible extension" that does not differ from his substance (*URF* I-2.4, 229–30).[20] According to Regis, however, there is an alternative Aristotelian view, according to which

> we see material things not in separate species, as the Platonists have taught, nor in eternal raisons, as Saint Augustine seems to have said,[21] nor in the idea that God has of them, but we see material things in themselves by ideas that are modalities of the soul that God produces in it as the first efficient cause, and that objects produce as secondary efficient and exemplary causes. (*URF* I-2.3, 232–33)

But though this Aristotelian account of ideas is familiar from Arnauld, there is in Regis a further element of the Plato/Aristotle dialectic that is not found in Arnauld's polemic with Malebranche. In particular, Regis also distinguishes in his *Use of Reason* between the "disciples of Plato" who hold that God knows creatures prior to creation by seeing them in his own essence, and the "disciples of Aristotle" who claim that it is due to the will of God that creatures participate in the divine nature in a particular manner (*URF* I-2.1, 207–8). Regis urges that the opinion of the Platonists is unacceptable since in God "thought does not precede will" (210). Regis therefore was clear in rejecting the sort of Platonism that serves to distinguish Malebranche's form of Cartesianism from what we find in Descartes.

Certainly one could question Regis's claim that either Aristotle or his scholastic followers anticipated the position that God's knowledge of his crea-

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20   *URF* = Regis, *Usage de la raison et de la foi*, ed. J.-R. Armogathe, Paris: Fayard, 1996), cited by book (-part), chapter and page.

21   The qualification 'seems' is explained by Regis's emphasis on the fact that Aquinas interpreted Augustine's views as being consistent with an Aristotelian account of ideas.

tures pertains primarily to his will.[22] Even so, Regis's appeal to the views of the Aristotelians reflects a deep opposition to Malebranche's Platonism. We have seen that this Platonism requires a rejection of Descartes's created truths doctrine. But Regis's remark that in God thought precedes will indicates that he takes his form of Aristotelianism to require this doctrine. Indeed, the doctrine is much more prominent in Regis than it is in Descartes. There is of course some mention of the doctrine in Descartes's published writings, as shown from the passage from the Sixth Replies I have cited. However, for the most part the doctrine is relegated to correspondence. In contrast, as we will discover, the doctrine is front and center in Regis's writings.

Regis's promotion of this doctrine is a bit unusual in the context of post-Descartes French Cartesianism. Not only Malebranche but also other prominent French Cartesians shunned the doctrine.[23] Though some recent commentators have seen Arnauld as a champion of it in his polemic with Malebranche,[24] in none of his main writings did Arnauld embrace it explicitly, even when he had a clear opportunity to do so.[25] However, in embracing the doctrine of created truths as a central feature of Cartesianism, Regis followed the lead of another French Cartesian, Robert Desgabets, whom Regis called "one of the greatest metaphysicians of our age" (*URF* III.7, 639). In a *Supplement* to Descartes's *Meditations*, which dates from the 1670s, Desgabets cites Descartes's doctrine that "the will of God is the free cause of essences and of all that is immutable"

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22   Particularly questionable is Regis's claim that Thomas anticipated such a position; see *URF* I-2.1, 208–09. In fact, Thomas's own view seems closer to the position in Malebranche that God has pre-volitional knowledge of creatures through divine ideas.

23   See Gouhier's discussion of "un cartésianisme sans 'création des vérités éternelles' " in his *Cartésianisme et augustinisme au XVIIᵉ siècle*, Paris: Vrin, 1978, pp. 156–64. Cf. Geneviève Rodis-Lewis, "Polemiques sur la création des possibles et sur l'impossible dans l'ecole cartésienne," in her *Idées et véritées éternelles chez Descartes et ses successeurs*. Paris: Vrin, 1985.

24   See, for instance, Denis Moreau, *Deux Cartésiens: La polemique entre Antoine Arnauld et Nicolas Malebranche*, Paris: Vrin, 1999, ch. 6; and Steven Nadler, "Arnauld's God," *Journal of the History of Philosophy* 46 (2008), pp. 517–38.

25   Arnauld failed to mention the doctrine during the course of his extended polemic with Malebranche, despite his knowledge that Malebranche was a critic of this doctrine. Moreover, when Leibniz wrote to him that "I agree with you against the Cartesians that possible things are possible prior to all the actual decrees of God" (*Leibniz to Arnauld*, 4/14 July 1686, in *The Leibniz-Arnauld Correspondence*, ed. and trans. H.T. Mason, New York: Garland, 1985, p. 56), Arnauld simply responded that he had not thought sufficiently about "the possibility of things" and the conception of God's choice among possible universes to comment on these issues (*Arnauld to Leibniz*, 28 September 1686, in *Leibniz-Arnauld Correspondence*, 77).

as "being of the greatest importance and having great and incomparable consequences."[26] Likewise, in his *Use of Reason*, Regis devotes a chapter to a defense of the claim "that the possibility and impossibility of things depend uniquely on the will of God as their immediate cause," concluding there that God "has made all modal beings possible by the same action by which he created body and mind capable or incapable of receiving certain modes" (*URF* I-1.28, 189–96).

I have noted that there is some question in Descartes whether the created truths doctrine has unrestricted scope. In fact, commentators with very different interpretations of this doctrine have agreed that its scope is unrestricted. In a groundbreaking discussion of this doctrine, Harry Frankfurt has insisted that it entails a "universal possibilism" on which eternal truths, including truths concerning God, are "inherently as contingent as" or "no more necessary than" any other propositions.[27] In Frankfurt's view, Descartes took the apparent necessity of these truths "properly to be understood only as relative to the character of our minds."[28] Though Jonathan Bennett has taken exception to the attribution to Descartes of a universal possibilism, he nonetheless endorses a conceptualist account of necessary truths on which their necessity consists in the fact that our mind does not allow us to conceive the opposite.[29] So for Bennett, as for Frankfurt, truths concerning God are only "relative to the character of our minds."[30]

There are reasons to doubt that the claim that even truths concerning God reduce to a created feature of our mind is fully consistent with all of Descartes's texts.[31] However, what I want to emphasize here is rather that Desgabets and Regis, who were the main post-Descartes defenders of this doctrine, were clear

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26   *Dom Robert Desgabets: Oeuvres philosophiques inédites* [RD], ed. J. Beaude, Amsterdam: Quadratures, 1983–85, pp. 6, 208. But cf. the emphasis on Desgabets's deviations from Descartes's version of this doctrine in Emmanuel Faye, "The Cartesianisms of Desgabets and Arnauld and the Problem of the Eternal Truths," *Oxford Studies in Early Modern Philosophy* 2 (2005), pp. 193–209, at pp. 197–99. See also Joseph Beaude, "Cartésianisme et anticartésianisme de Desgabets," *Studia cartésiana* 1 (1979), pp. 1–24.

27   Frankfurt, "Descartes on the Creation of the Eternal Truths," *Philosophical Review* 86 (1977), pp. 36–57, at p. 42.

28   Ibid., p. 45.

29   Bennett, "Descartes's Theory of Modality," *Philosophical Review* 103 (1994), pp. 639–67, at p. 647.

30   The difference is that Frankfurt takes this relativity to show that these truths are not necessary, whereas Bennett contends that the necessity of these truths is intrinsically mind relative.

31   Particularly troubling is Descartes's claim in the Fifth Meditation, with respect to the truth that God exists, that "it is not my thought that produces [*efficiat*] this, or imposes any

that the created truths doctrine applies only to truths concerning creatures.[32] Thus, Desgabets notes in his *Supplement* that "before we conceive that [God] freely determined himself to produce or to establish things and truths, there is nothing real distinct from him" (RD 6:208–09). In another text, dating from as early as the 1650s, he claims that "there is nothing subsisting nor existing, neither true or intelligible, that has a necessary relation to [the] divine essence," and that God "has not been determined to make or to establish any thing or any truth by which this is external to him" (RD 2:33). The necessity of the divine essence is thus set apart from the created necessity of truths concerning what is external to God. Even more explicitly, Regis distinguishes in the *Use of Reason* between eternal truths concerning the divine nature, which are "immutable and necessary with an absolute necessity and immutability," and eternal truths concerning the nature of created things, which "are the consequences of the divine will" and thus have only "a hypothetical necessity and immutability" (URF I-2.12, 276).

But though the doctrine of created truths is more clearly restricted in Desgabets and Regis than it perhaps is in Descartes, there is a sense in which these Cartesians embraced a more radical form of the doctrine than Descartes ever did. Whereas Descartes rejected the Platonic position, which Malebranche later endorsed, that there are ideas in God's intellect that inform his act of creation, he nonetheless retained the view that the effects of divine action pre-exist in some way in the divine nature. This view derives from the causal axiom, prominent in the Third Meditation, that the "reality or perfection" of the effect is contained in its cause "formally or eminently" (see AT 7:41). The indication in Descartes is that it follows from such an axiom that God "eminently" contains creatures in his infinite perfection.[33]

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necessity on anything, but on the contrary it is the necessity of the thing itself, namely, the existence of God, that necessarily determines me in thinking this" (AT 7:67).

32 It is also worth noting that Desgabets and Regis alike rejected not only the "universal possibilism that Frankfurt finds in Descartes, but also the conceptualist account of necessity that Bennett attributes to him. For both of these Cartesians, the truths have a genuine necessity that is grounded in the "indefectible" or inalterable natures that God has indifferently created. On Desgabets's view of created truths, see my *Radical Cartesianism*, §§2.3–2.4; cf. Monte Cook, "Degabets on the Creation of Eternal Truths," *Journal of the History of Philosophy* 43 (2005), pp. 21–36. On Regis's view of these truths, see *Radical Cartesianism*, §2.6; there is a further development of my interpretation of Regis in "Platonism and Conceptualism among the Cartesians," forthcoming in a volume on universals in early modern philosophy, which I am editing with Stefano Di Bella.

33 Descartes suggests that bodies are eminently contained in God, for instance, in his proof in the Sixth Meditation of the existence of the material world; see AT 7:79. In the Second Replies, Descartes defines formal containment as "whatever is in itself such as we

In contrast, Desgabets insisted that divine perfections "are so elevated above our thoughts" that both the essence and the existence of creatures can have their source only in the "abyss of perfections" (*abîme de perfections*) in God (RD 2:33). If anything, the suggestion here that creatures lack any intelligible connection to the divine essence is clearer in Regis. Thus, in the *Use of Reason* he responds to the traditional scholastic view that God sees creatures in his own perfections by claiming that

> God does not see creatures in his perfections, because it has been proved that the perfections of God have nothing in common with creatures, and by consequence that they cannot represent them; we must say only that God sees creatures in his will, insofar as it is by his decree that he produces them and conserves them. (*URF* I-1.24, 169)

Indeed, the view in Regis that God cannot see creatures in his perfections led him beyond what he took to be the Aristotelian position that creatures participate in the divine nature by means of God's will. For though such a position implies that the divine essence is similar to the essences of creatures, Regis insists that since God and creatures have nothing in common, not even God can make creatures participate in his nature.

For Regis, then, Aristotelianism points toward, even if it does not take us all the way to, a created truths doctrine in Descartes that conflicts with Malebranche's Augustinian Platonism. However, there is another purportedly Aristotelian aspect of Regis's views that requires him to distance himself from Descartes as well as from Malebranche. In the *Use of Reason*, Aristotelianism is relevant to the account not only of divine knowledge, but also of human cognition. Regis cites the maxim from "the ancients" that "there is nothing in the intellect that has not passed mediately or immediately through the senses" (*URF* I-2.3, 223). In this case, the opponents of the Aristotelians are not the Platonists, but rather with "the moderns," that is to say, the Cartesians. Regis focuses in particular on the Cartesian claim that the human soul has a faculty of "pure intellect" (*entendement pur*) that "acts independently of body" (*URF* I-2.3, 224–25).

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perceive," and eminent containment as "whatever is not such [as we perceive], but greater, such that it can take the place [of what we perceive]" (AT 7:161). These definitions are less than clear, to say the least, but I try to make some sense of them in *Descartes on Causation*, New York: Oxford University Press, 2008, ch. 2, which I correct on some points of detail in my "Causation and Causal Axioms," in *Descartes' 'Meditations': A Critical Guide*, ed. K. Detlefsen, Cambridge: Cambridge University Press, 2013, pp. 82–100.

We can indeed find the endorsement of pure intellect in Descartes, who claims in response to Gassendi in the Fifth Replies that he "distinctly showed on many occasions that the mind can operate independently of the brain; for the brain cannot in any way be employed in pure intellection [*ad puram intelligendum*], but only in imaging or sensing" (AT 7:358). As Margaret Wilson noted some time ago, the sort of dualism Descartes endorses here is stronger than the sort of contemporary "Cartesian dualism" that requires only that mental events differ from physical events, and not that some mental events lack even a correlation with physical events.[34] We will see that there is a similar commitment in Malebranche to a dualism that involves a robust form of disembodied pure intellection.

For Regis, however, such a faculty of pure intellect can belong neither to the human soul united to a body (*l'âme*) nor to a disembodied pure mind (*l'esprit*). Not to the human soul, since "the soul can act as a human soul only depending on body, and pure intellect does not depend on it, by supposition." But not a pure mind either, since the faculty

> supposes succession in its operation, and all succession supposes motion. But mind as such is not subject to motion. It thus is incapable of pure intellect, if by pure intellect is understood the faculty or power that the soul has to receive general ideas, which would be the opinion of the ancient philosophers. (*URF* I-2.3, 225–26)

Regis's conclusion is that "the ancient philosophers have reason to say that there is nothing in the intellect that did not first pass through the senses," since "the particular motions of the bodily organs are the true origin of all particular cognitions [*connaissances particulieres*] of the soul" (227).

Regis's argument against "the moderns" is compressed, to say the least. But it is helpful here to understand it as depending on a line of argument that is similar to one found in Desgabets. In a 1674 letter to Malebranche, Desgabets objected that the remarks in the *Search* imply a view of the soul as "a substance too detached from the relations it has to body" (OCM 18:84). He undoubtedly was thinking here the claim in that text that our mind has a faculty of pure intellect (*entendement pur*) that is capable "of knowing external objects without forming corporeal images of them in the brain to represent them"

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34   See Wilson's claim that Descartes's form of dualism differs from a contemporary "Cartesian dualism" insofar as the latter typically allows for the possibility that "every type of mental occurrence, from twinges of pain to metaphysical reflection … has a corresponding or correlated type of physical occurrence" (*Descartes*, London: Routledge, 1978, p. 180).

(*ST* III-1.1, *OCM* 1:381). Desgabets insisted that the human soul can have no such faculty given that it is "a thinking substance, but thinking in a certain manner, which is that the thoughts are modes naturally required to be united with corporeal motions" (*OCM* 18:84–85).

In his *Supplement* to the *Meditations*, Desgabets carried the argument to Descartes in a manner that is directly relevant to Regis's response to "the moderns." In his text, Desgabets indicated that one of the "principal faults" of Descartes is that he neglected the "commerce with the senses" and the essential dependence of human thought on the soul-body union. The argument there against Descartes depends on the premise that our soul has "neither time nor duration by an identity of nature," but rather has these "through union with motion, in which sense one says quite properly that the soul has a body and the body has a soul" (RD 5:190). That is to say, our soul does not have its particular kind of duration simply in virtue of being a thinking thing, but requires in addition a causal connection to motion in order to explain the fact that our thought has an indefinitely divisible temporal succession that matches this same sort of succession in motion.

The view that temporal duration is tied to motion is familiar from Aristotle's discussion of time in the *Physics*. Indeed, in work predating the *Supplement*, Desgabets noted that he held that time and motion "are not really distinguished, as Aristotle has taught" (RD 2:41). So also in the *Use of Reason*, Regis endorsed "this famous definition of Aristotle: *time is the measure of motion*" (*URF* I-2.25, 351). The suggestion in Regis, which is explicit in Desgabets, is that an indefinitely divisible time can measure our thoughts only if such thoughts are in fact causally connected to motion. For this reason we cannot have a pure intellect that is detached from body, but nonetheless involves a succession of thoughts that can be measured by the same time that measures motion. From the ancient Aristotelian definition of time, then, Regis drew a refutation of "the modern" view that the embodied mind has a pure intellect detached from any commerce with the body.

5   Conclusion

I have emphasized the importance of the ancient division between Plato and Aristotle to early modern developments in French Cartesianism. However, in his book, *The Battle of the Gods and Giants*, Tom Lennon has drawn attention to the importance during this period of a distinct, though in some respects related, division that Plato highlights in the *Sophist*. In this dialogue, the Stranger indicates to Theatetus that in the dispute over the nature of reality, "that we shall see is something like a battle of gods and giants." The giants are

those who are "trying to drag everything down to earth out of heaven and the unseen," whereas the gods maintain "with all their force that true reality consists in certain intelligible and bodiless forms." The Stranger's conclusion is that "on this issue an interminable battle is going on between the two camps" (*Sophist* 246a–c). Lennon sees confirmation of the interminable nature of this ancient battle in the fact that it carries over into debates over Cartesianism in the second half of the seventeenth century.[35]

One obvious difference between my use of the division between Plato and Aristotle and Lennon's discussion of the battle of the gods and giants is that I take the division to be within French Cartesianism, whereas Lennon takes the battle to be reflected in the contest between Cartesians and their Gassendist opponents.[36] For Lennon, it is Malebranche who is "the Cartesian epitome of views that are to be associated with the seventeenth-century gods,"[37] whereas Locke is the paradigmatic representative of the giants insofar as he is "on the opposite side to the Cartesians with respect to virtually every issue of significance in the period."[38] The claim that Malebranche represents the Cartesian version of the defender of the Forms obviously is similar to my claim that he offers a kind of Platonic Cartesianism. But the claim that given his systematic opposition to Cartesianism Locke represents the position of those who drag everything to earth seems to be quite different from my claim that Desgabets and Regis defend a form of Aristotelian Cartesianism.

Perhaps there is a way to mitigate this difference. For Lennon himself mentions Desgabets and Regis in *Battle of the Gods and Giants*, and suggests there that they offer an "empiricist" form of Cartesianism that is less inimical to the views of Gassendi and Locke than the form of Cartesianism that we find in Malebranche.[39] Elsewhere Lennon develops the position that Desgabets and Regis argued from the created truths doctrine to the conclusion that we depend on sensory experience for our knowledge of all truth. According to Lennon, this doctrine—on the version in Regis that he inherited from Desgabets—requires

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35   Lennon, *The Battle of the Gods and Giants: The Legacies of Descartes and Gassendi, 1655–1715*. Princeton: Princeton University Press, 1993, §3.

36   Ibid., p. 35.

37   Ibid., p. 239.

38   Ibid., p. 367.

39   See ibid., p. 210. In the new *Grundriss der Geschichte der Philosophie*, the entry on Desgabets in the section, "Der Cartesianismus in Frankreich," is included, along with the entries on Regis and Pierre Cally, in the sub-section, "Die Empiristische Strömung" (*Die Philosophie Des 17. Jahrhunderts, Band 2, Frankreich und Niederlande*, ed. Jean-Pierre Schobinger, Basil: Schwabe & Co., 1993, pp. 423–31). For a critique of this sort of characterization of Desgabets, see Monte Cook, "Desgabets as Cartesian Empiricist," *Journal of the History of Philosophy* 46 (2008), pp. 501–15.

that "before the fact of creation there can be no rational guarantee of what God creates; this can be determined only after the fact through experience."[40] And since this experience is *sensory* experience, all of our knowledge will depend on the senses; thus Desgabets and Regis alike endorsed the dictum that "there is nothing in the intellect except what was first in the senses" (*Nihil est in intellectu quin prius fuerit in sensu*). Do we not then have in their form of Cartesianism aspects of the position of the giants that we are to "drag everything down to earth out of heaven and the unseen"?

An initial response is that Desgabets and Regis in fact rejected the view that our knowledge of eternal truths depends *a posteriori* on sensory experience. This point is perhaps most clear in Regis, who claims explicitly that whereas "the actual existence of modal beings ... can be known only by the experience of the senses," the knowledge of the essences that ground the eternal truths is "very solid and very certain" since the essences themselves are "necessary and immutable" (*URF* I-2.9, 265).[41] Even if it is true that for Desgabets and Regis there can be no rational guarantee before creation, nonetheless in both of these Cartesians there is no doubt that after creation we can be certain *a priori* that these truths are both immutable and necessary.

This is not, of course, to deny any sense in which Desgabets and Regis are empiricists. After all, they clearly rejected a form of "rationalism" linked to Malebranche's insistence on the uncreated nature of eternal truths and on the existence of a pure intellect that operates apart from the body.[42] Contrary to Lennon's view, however, Desgabets and Regis neither derived the denial of pure intellect from the denial of *a priori* knowledge, nor inferred the denial

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40   Lennon, "The Cartesian Dialectic of Creation," in *The Cambridge History of Seventeenth-Century Philosophy*, ed. D. Garber and M. Ayers, Cambridge: Cambridge University Press, 1998, pp. 1, 355. For the view that Desgabets's acceptance of the created truths doctrine led him to be a knowledge empiricist, see also Patricia Easton, "Desgabets," in *Routledge Encyclopedia of Philosophy*, ed. E. Craig. London: Routledge, 1998; Easton and Lennon, *The Cartesian Empiricism of François Bayle*, New York: Garland, 1992, pp. 23–24; and Michael Ayers, "Theories of Knowledge and Belief," in *The Cambridge History of Seventeenth Century Philosophy*, vol. 2, pp. 1029–30.

41   Cf. Desgabets's insistence on a distinction between the mutable "being of existence" of temporal bodily modes, on the one hand, and the unchanging "being of essence" grounded in a substance that "has neither succession", nor time, nor duration, on the other (RD 6:240, 249).

42   But see the response to the claim that Desgabets was a Lockean sort of "concept empiricist" in Cook, "Desgabets as Cartesian Empiricist." For Cook, Desgabets's empiricism consists only in the claim that all of our ideas are united to bodily motions. For further discussion of this claim in Desgabets, see my *Radical Cartesianism*, ch. 4.

of *a priori* knowledge from the created truths doctrine. Rather, in the case of Regis, at least, the denial of pure intellect and the assertion of created truths are separate planks of his Aristotelian platform.

These considerations do not show that Lennon is wrong to conceive of seventeenth-century debates over Cartesianism in terms of the ancient battle of the gods and giants. However, I have been concerned, as Lennon was not, to emphasize the different ways in which French Cartesianism was linked to the views of the ancients. On my view here, the battle lines are drawn not by Descartes and Gassendi, but rather by Malebranche and Regis. Lennon's discussion shows that Malebranche's form of Platonic Cartesianism is a prominent one in the early modern period. What is less appreciated is that there was a competing form of Aristotelian Cartesianism during this time that Regis inherited from Desgabets.

To be sure, the attempt to reconcile Aristotle and Descartes is not unique to these Cartesians. After all, I mentioned the impulse in early-modern France, following Descartes's own half-hearted example, to "Aristotelianize" Cartesian physics. What we have in Regis, however, is the very different attempt to introduce Aristotelian elements into the Cartesian account of ideas and the nature of the human soul. Such an attempt is arguably both philosophically and historically more significant than the attempt to combine ancient Aristotelian and modern Cartesian forms of physics insofar as only the former provides a clear counter to Malebranche's project of "Platonizing" Cartesianism. In the case of Malebranche and Regis alike, however, Descartes's form of Cartesianism required modification in order to be connected in a proper manner to the views of the ancients. For Malebranche, it was Descartes's created truths doctrine that needed to be jettisoned to allow for a genuinely Platonic Cartesianism. In contrast, Regis's Aristotelian Cartesianism required not only the acceptance of this doctrine as foundational, but also the rejection of Descartes's commitment to pure intellect. Though we have seen that Descartes had a somewhat ambivalent view of the usefulness of ancient philosophy, in light of these later developments in French Cartesianism we can recognize as well the ambivalent relation that both his views and later forms of French Cartesianism bear to the ancient traditions deriving from Plato and Aristotle.[43]

Leibniz, Plato, and 'The Dignity of Our Mind'

Nicholas Jolley

Whitehead famously remarked that the safest general characterization of the history of European philosophy is that it consists of a series of footnotes to Plato. Whatever one may think of the merits of this historical generalization, it seems fair to say that Leibniz would not have protested very strongly at having his own philosophy characterized in these terms;[1] Leibniz insists again and again that he is engaged in continuing and developing the Platonic tradition in philosophy.[2] Leibniz's own insistence on this role seems entirely appropriate. Much of Leibniz's metaphysics can be seen as an attempt to develop the theme, announced in the *Timaeus*, that God created a world that mirrors his own perfections (29e). And the related idea that it is impossible for the best to produce anything but the highest becomes a cornerstone of Leibniz's theodicy (*Timaeus* 30a).

Platonic themes are not of course limited to Leibniz's general metaphysics and theodicy; they are also prominent features of his philosophy of mind and knowledge. Yet characteristically Leibniz does not simply echo the teachings of his master in these areas; he is engaged rather in a project of creative reinterpretation. As Leibniz himself notes, he departs from Plato by presenting a dispositional version of the theory of innate knowledge that is freed from the

1   Until recently there has been little attention paid, at least by Anglo-American scholars, to Leibniz's indebtedness to Plato. For recent studies that emphasize Leibniz's Platonic or neo-Platonic inheritance, see Mercer, Christia. *Leibniz's Metaphysics: Its Origin and Development*. New York and Cambridge: Cambridge University Press, 2000. And, Brown, Stuart. "The Proto-Monadology of the *De Summa Rerum*." in *The Young Leibniz and his Philosophy* (*1646–76*), edited by Stuart Brown. Dordrecht: Kluwer, 1999, pp. 263–87. Cf. Riley, Patrick. *Leibniz's Universal Jurisprudence: Justice as the Charity of the Wise*. Cambridge, Mass. Harvard University Press, 1996, for an exploration of Platonic themes in Leibniz's political philosophy.

2   See, for instance, Leibniz, *De Enthusiasmo Platonico*, 25 June 1707. In L.L. Dutens ed., *G.G. Leibnitii Opera Omnia*, 6 vols., Geneva, 1768, vol. II, pp. 222–225; also Leibniz, *Philosophical papers and letters of G.W. Leibniz*, translated and edited by Leroy E. Loemker. Dordrecht: Reidel. 1969, p. 547; further references to the Loemker edition are abbreviated by L, Arabic page number.

'mythical' Platonic doctrine of reminiscence or recollection.[3] In this paper I seek to explore the nature of Leibniz's innovations and argue that they give rise to certain tensions in his philosophy. I shall argue in particular that the problems raised by Leibniz's dispositional theory of innate ideas and knowledge (hereafter 'dispositional nativism') are avoided by the alternative account that he offers in terms of the mind's reflection on its own nature; as we shall see, this account is itself an expression of Platonic themes. The fact that the 'reflection account' of nativism is free from these problems may illuminate the preference that he sometimes shows for a theory of innateness that many readers have found puzzling.

1   Section 1

In a draft of a letter to Bierling, Leibniz criticizes Locke for failing to appreciate the dignity of our mind.[4] In passages like this one Leibniz is obviously giving expression to the Platonic view that there is something divine or quasi-divine about the human mind; as Leibniz is fond of putting it, our mind is a little god (see, e.g., *Monadology* 83). But what specific doctrines does Leibniz have in view when he writes in these terms? If one surveys Leibniz's more esoteric doctrines there are a number that seem relevant. For example, the human mind imitates the divine perfection of omniscience by perceiving the whole universe, and it imitates the divine perfection of omnipotence in its architectonic powers:

> The mind not only has a perception of the works of God, but it is even capable of producing something which resembles them, although on a smaller scale. For our soul (to say nothing of the wonders of dreams, in which we invent without difficulty—but also involuntarily—things which we would have to think about for a long time before we could

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3   For a valuable study of the relationship between Leibniz's dispositional theory of nativism and the Platonic theory of reminiscence, see Hunter, Graeme, and Inwood, Brad. "Plato, Leibniz, and the Furnished Soul," *Journal of the History of Philosophy*, 22:4 (1984), pp. 423–434.

4   'Non satis mentis nostrae dignitatem aestimavit, nec satis intellexit in ipsa latere principia necessariarum veritatum; neque etiam satis has ab aliis distinxit; et omnino magis ad vulgi opiniones firmandas quam ad solida judicia ferenda valet.' Leibniz to Bierling, undated draft of the letter of 24 October 1709. In Gerhardt, C.I., ed. *Die Philosophischen Schriften von G.W. Leibniz*. 7 vols. Berlin: Weidmann, 1875–90, vol. VII p. 485; all further references to the Gerhardt edition will be to G, followed by roman volume number, Arabic page number; Leibniz Briefwechsel 67, fo. 51v.

come up with them while awake) is also architectonic in its voluntary actions, and in discovering the sciences in accordance with which God has ordered things (by *weight, measure, number* etc.) (L 640)

Yet when Leibniz criticizes Locke and others for failing to appreciate the dignity of the human mind, it is less these esoteric doctrines that he has in view than two more familiar doctrines that he shares with other philosophers: the human mind is an immaterial and simple substance, and it has innate ideas and knowledge.[5] Leibniz often treats these two issues in tandem. For instance, in the final version of the letter to Bierling, Leibniz draws attention both to Locke's denial of innate ideas and principles and his unsoundness on the immateriality of the soul (G VII 488–9). The same pattern is repeated in Leibniz's commentary on John Toland who of course was widely viewed as a radical disciple of Locke himself. Here Leibniz announces that he plans to take up two important issues treated by Toland: 'whether there is something in our thoughts which does not come from sense, and whether there is something in nature that is not material' (G VI 491). According to Leibniz, Toland, like Locke, is unsound on both issues.

It seems clear, then, that for Leibniz any adequate conception of the dignity of our mind must involve at least the following two elements: the human mind is an immaterial, simple substance and it has innate ideas and knowledge. Philosophers such as Locke and Toland fail to rise to such a conception by explicitly denying the latter and raising doubts about the former. No doubt the other, more esoteric doctrines could be included on the list, but these two doctrines are the inner core of any such conception; they are the 'bottom line', in contemporary parlance. No philosopher who fails to embrace these doctrines can be said to appreciate the dignity of the human mind. But it is noteworthy that Leibniz does not simply portray these doctrines as logically independent elements of an adequate conception of the mind's dignity; on the contrary, there are passages that suggest that, for Leibniz, there are logical links between them. As we shall see, in the *New Essays*, for instance, Leibniz argues that those philosophers like Locke who hold that the mind is a *tabula*

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5   Leibniz's quarrel with Locke is clearly an episode in what Thomas Lennon has called 'the battle of the gods and giants' in early modern philosophy. For a magisterial study of the opposition between Platonism and materialism in this period, see his *The Battle of the Gods and Giants: The Legacies of Descartes and Gassendi, 1655–1715*. Princeton: Princeton University Press, 1993.

rasa ultimately render the mind corporeal.[6] And in some prefatory notes to the *New Essays* Leibniz argues that the doctrine of the immateriality of the human mind depends on the doctrine of innate ideas and knowledge (A VI.6 45n).

Today the issues of immaterialism and nativism may seem to have little to do with one another; they may seem to belong to separate and largely unrelated provinces of philosophy. But Leibniz's tendency to see logical links between these doctrines should not seem strange to philosophers familiar with the Platonic tradition; indeed, it is a core part of Leibniz's Platonic legacy. In the *Meno* (86b), for instance, which is famous for its proof of recollection so admired by Leibniz, Socrates goes on to draw consequences about the metaphysical status of the human soul:

> Then if the truth about reality is always in our soul, the soul would be immortal so that you should always confidently try to seek out and recollect what you do not know at present—that is, what you do not recollect? M. Somehow, Socrates, I think that what you say is right.[7]

In the *Phaedo* Socrates develops this into a full-fledged argument for immortality from the doctrine of learning as recollection. It is of course a controversial issue how far the Socratic doctrine of the immortal soul foreshadows the Leibnizian, and later Wolffian, conception of the mind as a simple, immaterial substance. But Leibniz himself certainly believed that his own teaching here aligned him with Plato and Pythagoras.[8] And he believed that the human mind was naturally immortal if and only if it is an immaterial substance. In any case Leibniz is very much following in Plato's footsteps in maintaining the existence

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6   Leibniz, Gottfried Wilhelm. *Nouveaux Essais sur l'Entendement Humain*, Book II, Chapter 1; further references to this work of various editions are abbreviated by NE, roman book number, Arabic chapter number; German Academy of Sciences, ed. *G.W. Leibniz: Saemtliche Schriften und Briefe*. Darmstadt: Akademie Verlag, 1923–, series VI, volume 6; further citations to this edition are abbreviated by A, roman series number, Arabic volume number; *G.W. Leibniz: New Essays on Human Understanding*, translated and edited by Remnant, Peter and Bennett, Jonathan. Cambridge: Cambridge University Press, 1981, p. 110; further references to this edition are abbreviated by RB, followed by Arabic page number.

7   Plato, *Five Dialogues*, translated by Grube, G.M.A. Indianapolis: Hackett Publishing, 2002, p. 78.

8   See, for instance, *Ad Christophori Stegmanni Metaphysicam Unitariorum*: 'Et longe generosius mihi Pythagoras et Plato sensisse videntur, qui agnovere Mentes esse incorporeas et immortales natura sua, et quandam esse Summam Mentem cuncta sapientissime gubernantem.' Jolley, Nicholas. "An Unpublished Leibniz MS on Metaphysics," *Studia Leibnitiana* VII (1975), p. 177.

of logical connections between metaphysical theses about the human mind and claims in the theory of knowledge.

Leibniz's Platonic inheritance in this area is beyond dispute, but his use of that inheritance is not a case of slavish imitation. As Leibniz himself notes in the *Discourse on Metaphysics*[9] and elsewhere, he departs from Plato by rejecting as mythical the commitment to pre-existence enshrined in the doctrine of reminiscence; Plato's theory is 'very sound, provided that we take it in the right way and remove the mistake about pre-existence, and do not imagine that the soul must already at some other time have distinctly known and thought about what it learns and thinks about now' (G IV 451–2: WF 78). But there is one further difference from Plato that Leibniz does not seem to have noticed, or at least to which he does not draw our attention. In the *Meno* and especially the *Phaedo* Socrates is arguing from reminiscence to immortality; that is, the argument is from considerations about the nature of knowledge to metaphysical doctrines about the human soul. Leibniz, by contrast, tends to reverse the direction of the argument. Characteristically, Leibniz infers from metaphysical doctrines about the human soul to epistemological theories of innate knowledge and ideas. As we shall see, this change in the direction of the argument, combined with his rejection of the doctrine of reminiscence, create difficulties for his attempt to establish a specifically dispositional version of nativism.

2   Section 11

There is no doubt that Leibniz seeks to move from metaphysics to a nativist theory of knowledge, but it is important to see that some of the metaphysical principles that he invokes cannot deliver the form of nativism that he wishes to uphold; they can yield results that empiricists would reject, but they do not imply a specifically dispositional version of nativism. To see why, consider the passage from the *New Essays*, which provides some of the strongest evidence that Leibniz saw a logical connection between the immateriality of the human mind and the denial of the *tabula rasa*:

> Experience is necessary, I admit, if the soul is to be made to have such and such thoughts, and if it is to take heed of the ideas that are within us. But how could experience and the senses provide the ideas? Does the soul have windows? Is it similar to writing-tablets, or like wax? Clearly, those

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9 See section 26 of W. Leibniz, *Discours de metaphysique*. Further references to this work are abbreviated by DM, Arabic section number.

who take this view of the soul are treating it as fundamentally corporeal. (NE II.i, AVI.6: RB 110)

Leibniz's empiricist adversaries are thus supposed to be committed to the following argument in its simplest form:

(1) The soul is a *tabula rasa*.
(2) If the soul is a *tabula rasa*, it is not an immaterial substance.
(3) Therefore, the soul is not an immaterial substance.

Now the second conditional premise is justified by an appeal to the causal independence of substances: if the soul were a *tabula rasa* it would be acted on by external bodies, but no immaterial substance can be acted upon by anything external to it (except God). The second premise is one that Leibniz himself would accept; indeed, it is a central principle of his metaphysics. It seems clear, then, that Leibniz is suggesting the following transformation of the argument—one that uses *modus tollens* rather than *modus ponens*

(1) If the soul is a *tabula rasa*, it is not an immaterial substance.
(2) But the soul is an immaterial substance.
(3) Therefore, the soul is not a *tabula rasa*.

This argument thus moves from a metaphysical doctrine about the human mind to an anti-empiricist conclusion: the soul is not a *tabula rasa* or blank slate. But what does it mean to deny that the soul is a *tabula rasa*? Well, it surely means simply that the mind, even at birth, has content, but it does not specify the form in which the content is present in the mind. In particular, to deny that the human mind is a *tabula rasa* does not entail that it starts out with content in the form of dispositions to think in certain ways. Consistently with its not being a *tabula rasa*, the human mind could have occurrent mental states and nothing else.

That Leibniz was aware that these metaphysical principles stop short of delivering a specifically dispositional version of nativism is confirmed by a close look at the *Discourse on Metaphysics*. At first sight this may seem a surprising claim: it may seem that in this work Leibniz does seek to argue from the mind's status as a causally independent, immaterial substance to dispositional nativism. Certainly the whole movement of the first thirty sections of the work is from metaphysics to theory of knowledge, and the *Discourse* contains an important statement of dispositional nativism: 'our souls have virtual knowledge of all these things [geometrical theorems] and . . . to grasp these truths

they need only to have their *attention* drawn to them' (DM 26, G IV 451–2: WF 78). But although in the relevant sections of the *Discourse* Leibniz certainly appeals to the mind's status as a causally independent immaterial substance, he stops short of saying that the dispositional theory follows from these principles. Rather Leibniz says something weaker:

> . . . the thesis that we permanently have forms in our minds fits in with my principles, for nothing naturally enters our mind from outside, and it is a bad habit of ours to think of our soul as receiving certain messenger species, or as if it had doors and windows. (DM 26, G IV 451: WF 78)

Once again, then, it is clear that 'my principles' establish something with which the empiricists take issue—the mind is not a *tabula rasa*—but they do not establish a dispositional theory. To put the point rather differently, the principles in question (i.e. the mind's status as a windowless immaterial substance) establish that any state the mind has is not caused by anything external to it; they do not establish that these states include dispositional ones. If the mind has dispositional states, they are not externally caused; it is an open question whether there are any such states.

Does Leibniz have any argument in the *Discourse* for a specifically dispositional version of nativism? The most that Leibniz offers is a sketch of an argument from expression. After alluding to the debate between Malebranche and Arnauld over the nature of ideas, Leibniz turns to the issue of nativism:

> In fact our soul does always have in it the ability (*qualité*) to represent to itself any nature or form, when the occasion for thinking of it arises. And I believe that that ability of our soul, insofar as it expresses some nature, form, or essence, is properly called the idea of the thing, and it is in us and is always in us, whether we are thinking of the thing or not. For our soul expresses God and the universe, and all essences as well as all existences. (DM 26, G IV 451: WF 78)

In Woolhouse and Francks's translation it may well seem that Leibniz is here deriving a version of dispositional nativism from the mind's expression of God and the essences in his intellect. But the passage gives rise to two kinds of question. First, it is not clear that the elusive French term '*qualité*' is best translated as 'ability'; Woolhouse and Francks may be unduly influenced by the text of the earlier *Quid sit Idea?* where Leibniz seems to define an idea as a faculty of thinking (G VII 263: L 207). But even if the translation is defensible, it may still be asked whether Leibniz's argument from expression here can deliver

specifically dispositional nativism. As it is presented in the *New Essays*, for instance, dispositional nativism asserts more than that the mind has a capacity to think, say, of triangles; it asserts that the mind is differentially predisposed towards such occurrent thoughts rather than others. It is surely doubtful whether the argument from expression can yield so strong a conclusion.

It is natural to object that the above account of dispositional nativism is in one way incomplete. At least according to later expositions, such as the *New Essays*, the picture seems to be this: dispositional properties, such as innate ideas, supervene on the mind's unconscious perceptions (*petites perceptions*). In the Preface to the *New Essays* Leibniz goes out of his way to invite a comparison between unconscious perceptions and insensible particles or corpuscles in physics; the claim seems to be that innate ideas supervene on unconscious perceptions in the same sort of way that physical dispositions, such as fragility and solubility, supervene on the physical microstructure of bodies (NE Preface, A VI.6: RB 56). Thus Leibniz could establish dispositional nativism by first establishing the existence of unconscious perceptions (by appealing, for instance, to the Identity of Indiscernibles and the Law of Continuity), and then showing further that there must be dispositional properties that supervene on the unconscious perceptions. But there is no such line of argument in the *Discourse on Metaphysics* where unconscious perceptions are not mentioned as such (as opposed to confused perceptions). In the *New Essays*, there are certainly arguments for the existence of unconscious perceptions; but although the picture that emerges is that innate ideas do indeed supervene on unconscious perceptions, it is less clear that there is an explicit argument for this thesis.

3   Section III

We have seen, then, that in contrast to Plato Leibniz seeks to argue from metaphysical principles about the soul to a form of nativism; it is unclear, however, how far Leibniz is able to argue from these principles to the specifically dispositional version of nativism that he seeks to establish. Leibniz's dispositional version of nativism raises a further problem—a problem of consistency. It is one of the major tenets of Leibniz's metaphysics that human minds are mirrors of God or little gods; this indeed, as we have seen, is a central part of his Platonic inheritance. But it is natural to object that since God is pure act he can have no dispositional properties. With regard to the issue of nativism there is a troubling disanalogy between the divine mind and the human mind. Thus Leibniz's commitment to dispositional nativism seems inconsistent with any

moderately strict interpretation of the thesis the human mind is a mirror of God. We can bring out the problem by noting the contrast in this respect with the doctrine that the human mind is an immaterial substance. God, like the human mind, is straightforwardly an immaterial, simple substance; indeed, immateriality and simplicity are predicated univocally of God and human minds. It may be objected that matters are not quite so straightforward with regard to causal independence or self-sufficiency, for whereas God's causal self-sufficiency is total, that of the human mind is qualified by its status as a substance created by God. But, as I have argued elsewhere, Leibniz can claim that the causal self-sufficiency of the human mind is at least unqualified with respect to its own ontological level. There is thus a sense in which the self-sufficiency of the human mind is consistent with its status as a creature.[10]

It is possible to reply to the objection of inconsistency by saying that it is not so clear that Leibniz would have seen a disanalogy here. That is, it is not so clear that for Leibniz there are no dispositional properties in the divine mind. Mates, for instance, has suggested that Leibniz's talk of possible worlds in God does not commit him to the existence of 'third realm' entities; it is rather to be reductively analyzed in terms of God's dispositions to think in certain ways. To say that there is a possible world in God containing a counterpart of Julius Caesar who does not cross the Rubicon is to say that God has a disposition to think of such a counterpart of Julius Caesar. According to Mates, then, the term 'idea' is univocal with respect to human and divine ideas; it is not simply in the case of human beings that an idea is a faculty of thinking.[11]

Even if we reject Mates's account of possible worlds and complete concepts, we can still mount a modest defense of Leibniz against the charge that dispositional nativism introduces a radical disanalogy between God and human minds. The underlying worry, after all, is that whereas according to dispositional nativism there is unactualized potentiality in the human mind, in God there is no unactualized potentiality; according to orthodoxy, God is pure act. But any interpretation of Leibniz's theory of possible worlds in the divine intellect must recognize that there is a sense in which there is unrealized potentiality in the divine intellect; not everything in his mind is actual. It may be

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10   See N. Jolley, "Leibniz and the Causal Self-Sufficiency of Substances," *Causality and Mind* (Oxford: Oxford University Press, 2013), pp. 169–82.

11   Mates, Benson. *The Philosophy of Leibniz: Metaphysics and Language*. Oxford: Oxford University Press, 1986, pp. 48–50. It is a fundamental feature of Mates's interpretation that Leibniz is not a Platonist in the sense of admitting irreducibly 'third realm' entities into his ontology.

objected that this reply confuses the objective and formal or intrinsic reality of divine thought. To say that there are unactualized possible worlds in the divine intellect is to talk about the objective or representational reality of his thought; it is not to say anything about the formal reality of such thought. At this level God is indeed pure act: God has wholly actual thoughts of unactualized possibles. But Leibniz might hold that even the recognition of potentiality at the level of the objective reality of divine thought is all that is required to defend the consistency of dispositional nativism with the 'mirror of God' doctrine.

A second line of defense of Leibniz against the charge of inconsistency might focus on the notion of a disposition itself. Today, when we think of dispositional properties, we tend to consider fragility and solubility as the paradigm examples. But in the case of Leibniz such examples of dispositional properties may be doubly misleading. First, such dispositional properties remain unactualized in the absence of a stimulus; secondly, the stimulus is, typically at least, external to the thing itself (for instance, the dropping of the glass on the stone floor). For Leibniz, by contrast, no external stimulus is required to activate the mental disposition; relatedly, to say that a mind has a disposition to phi is to say that it will phi unless prevented. To recognize these differences is not of course to say that, for Leibniz, every dispositional property is activated, for prime matter in the mind may impede the activation of my innate idea of God; that is, it may prevent me from ever having an occurrent thought of God. But a proper understanding of a mental disposition in Leibniz suggests that it is closer to an actual, non-dispositional property than we might initially suppose.

We have seen, then, that Leibniz encounters problems in attempting to derive dispositional nativism from metaphysical principles and to combine this doctrine with his core thesis that the human mind is a mirror of God. These problems may not be insuperable; Leibniz may have the resources to solve them, or at least mitigate their severity. But there are enough problems posed by dispositional nativism to make it natural that Leibniz should look around for an alternative version of nativism which does not give rise to these difficulties. And this is indeed what we find: Leibniz advances an account of nativism in terms of the mind's reflection on its own nature: let us call this the 'reflection account' of nativism. Although Leibniz rarely, if ever, expressly indicates the fact, it seems that this is a rival account of nativism. At least this is the way the account will be presented here. For to claim that the 'reflection account' of nativism incorporates a dispositional component would be to destroy its motivation by reintroducing the very difficulties we have already examined.

4   Section IV

There is no doubt that Leibniz sees no problem in reconciling the 'reflection account' of innateness with his Platonic or neo-Platonic thesis that there is something divine about the human mind. In a letter to Hansch on the Platonic philosophy (1707) Leibniz introduces a statement of the reflection account against the background of the convictions that he shares with Plato and his successors such as Plotinus. Leibniz tells Hansch that he highly approves of the Platonic doctrine that there is an intelligible world in the divine mind or what he also calls the region of ideas (Du II 222: L 592). And since the Platonists are further justified in holding that minds are images of the divinity, Leibniz says that we can agree with Plotinus that every mind contains an intelligible world within itself: 'the seeds of the things we learn are within us' (Du II 223: L 593). But instead of unpacking this claim in terms of dispositional nativism, Leibniz offers a version of the reflection account:

> Since we discover *being, the one, substance, action*, and the like within ourselves, and since we are conscious of ourselves, we need not wonder that their ideas are within us. (Du II 223: L 593)

Leibniz may not use the term 'reflection' here, but is it clear that he is talking about the mind's ability to acquire ideas through reflecting on, or becoming self-conscious about, its own nature.

To introduce Leibniz's 'reflection account' of innateness by means of the letter to Hansch is, I think, illuminating, since this letter explicitly links the account with Leibniz's commitment to Platonic themes. Leibniz's statements in this short work serve to guard against possible misconceptions. The best-known expressions of the 'reflection account' are found in the *New Essays on Human Understanding*, but it is clear from the letter to Hansch that it would be a mistake to suppose that the theory is essentially an *ad hoc* response to Locke's polemic against nativism, prompted by Leibniz's eirenical desire to find common ground wherever possible. It is true of course that in the *New Essays* Leibniz does respond to Locke in this eirenic manner: consider, for instance, this attempt to find common ground in a passage from the Preface to the *New Essays*:

> Perhaps our gifted author will not entirely disagree with my opinion. For after having devoted his whole first book to rejecting innate illumination, understood in a certain sense, he nevertheless admits, at the start of the second book and from there on, that the ideas which do not originate in sensation come from reflection. But reflection is nothing other than

attention to what is within us, and the senses do not give us what we carry with us already. In view of this, can it be denied that there is a great deal that is innate in our mind, since we are innate to ourselves, so to speak, and since we include Being, Unity, Substance, Duration, Change, Action, Perception, Pleasure, and hosts of other objects of our intellectual ideas? (NE Preface, A VI.6: RB 51)

But though the 'reflection account' serves the purpose of accommodating Locke, it is not merely a superficial move in a polemic; it strikes deep roots in Leibniz's thought. Moreover, the reflection account was not originally developed for the purpose of responding to Locke. The 'reflection account' of innateness is already found articulated in the *Discourse on Metaphysics*, written nearly twenty years before:

> But in whatever way we take it, it is always false to say that all our notions come from the senses that are called external, for the notion I have of myself and of my thoughts, and therefore of being, substance, action, identity, and many others, all come from an internal experience (DM 27, G IV 452–3: WF 79)

Although Leibniz does not explicitly say that this is a doctrine of innate ideas, the essentials of the doctrine are present in a passage like this one.

The reflection account is thus motivated by a desire to articulate a Platonic vision of the world. Moreover, the 'reflection account' has two philosophical advantages over dispositional nativism. First, in contrast to the problem posed by dispositional nativism, Leibniz faces no real difficulty in grounding the 'reflection account' in his core metaphysical doctrines; for all he needs is the uncontroversial premise that minds have the capacity for reflection or introspection. Indeed, for Leibniz, this is arguably a definitional truth about minds: what distinguishes minds from the lower monads is their capacity for self-consciousness and knowledge of necessary truths. Secondly, and more importantly perhaps, the 'reflection account' faces no problems of consistency with Leibniz's core thesis that human minds are made in the image of God. For since self-consciousness is a property of higher monads, it seems entirely acceptable to say that God can reflect on his own perfections: God must have some analogue of this property that distinguishes minds or spirits from the lower monads. When human minds reflect on their own properties, they are doing something that is very godlike.

If the 'reflection account' of innateness has these advantages over dispositional nativism, why has the doctrine seemed so unsatisfactory to commentators?

In *Problems from Locke* John Mackie voices standard complaints against the doctrine. First, the reflection account essentially trivializes nativism by equating the innate with the non-sensory:

> To say that God has put these ideas into our mind but left them latent would be no more than to say that we have by nature the powers of perceiving, doubting, believing, and so on, together with the ability to be self-conscious about their exercise. Of course Locke, and everyone else, concedes this.[12]

In formulating this charge of triviality, Mackie somewhat misrepresents Leibniz's position, and how it differs from Locke's. For Leibniz is clear that, unlike Locke, he holds that 'this reflection is not limited to just the operations of the mind ... it goes as far as the mind itself, and it is in perceiving the mind that we perceive substance' (A VI.6 14);[13] we have ideas, through reflection, not only of substance, but also of cause and identity, for instance. Thus it is not quite correct to claim that Leibniz is saying no more than Locke himself would concede. But if Leibniz's 'reflection account' still seems to trivialize nativism, this charge might not have troubled him too much. Leibniz proposes an amendment to Locke's theory, but he intends it as a friendly amendment. As we have seen, Leibniz is anxious to stress the common ground between himself and Locke.

Mackie's other charge is more serious. To concede the existence of ideas of reflection:

> ... will not support what is distinctive in the doctrine of innate notions, in particular the claim that we know necessary truths in mathematics, theology, and ethics, and the explanation of how we can know them.[14]

Although Mackie does not explicitly distinguish them, he seems to have two distinct criticisms in mind here. In the first place, the 'reflection account' can at most explain the acquisition of *ideas*; it can say nothing specifically about

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12   Mackie, J.L. *Problems from Locke*. Oxford: Oxford University Press, 1976, pp. 213–14. Some of Mackie's criticisms are also to be found in my *The Light of the Soul*. Oxford: Clarendon Press, 1990, Ch. 10. Thus I am here arguing against my earlier views.

13   Cf. Leibniz, *G.W. Leibniz: Textes inédits*. 2 vols., edited by G. Grua. Paris: Presses Universitaires de France, 1948, vol. II, p. 558; further references to this edition are abbreviated by Gr, Roman volume number, Arabic page number.

14   Ibid., 214.

knowledge of necessary truths. Secondly, the 'reflection account' is limited in the scope of its subject matter; although it may offer an explanation of the acquisition of certain metaphysical ideas or concepts, it has nothing to say about the origin of ideas in mathematics, theology, and ethics. At least with respect to the second issue, Mackie's criticisms can, I believe, be answered from inside the Leibnizian framework. Let us take each of the three disciplines in turn.

It is surely mathematics, the first discipline, that seems to be the most challenging case. By reflecting on the properties of my mind, I can perhaps acquire the ideas of substance and cause, but how can I acquire geometrical concepts in this way? We can bring the problem to a sharp focus by considering Leibniz's rhetorical question: 'I would like to know how we could have the idea of being if we did not, as beings ourselves, find being within us' (NE I.1, A VI.6: RB 85–6). On the face of it, it would seem absurd to make a comparable claim with respect to geometrical concepts: How could we have the idea of a triangle, unless as triangles ourselves, we found triangles within us?

We can make some progress with this issue by appealing to the notion of the eminent possession of a property: when a substance possesses a property eminently, it does not possess the property formally—i.e. the property itself—but it possesses a grander version of that property. For instance, if Jones is 6 feet tall, then he possesses eminently the property of being 5 feet 10 inches tall; but obviously he does not possess this property formally. Now the concept of the eminent instantiation of a property is most familiar in the case of God. God of course is not formally physical or geometrical, but he possesses higher versions of these properties. Thus simply by reflecting on his own nature God can see, for example, what it is to be a triangle. Following Descartes's own lead in the Third Meditation[15] CSM II 31), Leibniz can make the same claim with regard to the human mind; my mind is not formally triangular, but it is eminently so. Thus the human mind can understand what it is to be a triangle by reflecting on its own nature and perfections. Leibniz's commitment to the mirror of God doctrine puts him in a strong position to justify such a claim. Of course

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15   Descartes, René. *Oeuvres de Descartes*. Adam, Charles, and Tannery, Paul, eds. Paris: Vrin, 1897–1913, 12 vols.; repr. Paris, 1964–76, vol. VII, page 45; further references to this edition are abbreviated as AT, Roman volume number, Arabic page number; Descartes, René. *The Philosophical Writings of Descartes*, 3 vols., translated and edited by Cottingham, John, Stoothoff, Robert and Murdoch, Dugald; vol. 3 includes Kenny, Anthony. Cambridge: Cambridge University Press, 1984, vol. 2, page 31; further references to this edition are abbreviated CSM (or CSMK), Roman volume number, Arabic page number.

Leibniz's theory of the eminent possession of properties is not without difficulties, but it at least frees his account from obvious absurdities.[16]

In one way the case of theology may seem to be easy to reconcile with the 'reflection account'. The case is easy because of Leibniz's commitment to the mirror of God doctrine; by reflecting on my mind I can acquire ideas of substance, unity, and cause; I thereby acquire concepts of properties that can be predicated univocally of God and human minds. But in another way the case of theology is more challenging. It is God's infinity that may seem to pose the problem. For Leibniz agrees with Descartes against Locke that we cannot attain the idea of infinity by simply repeating our idea of finite quantities and seeing that nothing stops from doing this without limit; thus if my mind is a finite being, I cannot acquire the idea of infinity in this way. The key to the solution of this problem is to notice that for Leibniz 'each substance has something of the infinite, insofar as it involves its cause, God; i.e. it has some trace of omniscience and omnipotence' (G VII 311).[17] Thus it seems that by reflecting on my mind I can acquire the idea of infinity that is obviously a central ingredient of the concept of God.

The case of ethics may seem scarcely less challenging than that of mathematics, but again, Leibniz is not without resources for extending the 'reflection account' into this area. Notice that at least one of Leibniz's lists of ideas that reflection provides includes pleasure (NE Preface, A VI.6: RB 52), and given the nature of Leibniz's moral theory, it would seem that the concept of pleasure

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16   An alternative way of broadening the scope of the 'reflection account' to accommodate mathematical ideas is suggested by Leibniz's doctrine of expression. In the *Discourse on Metaphysics* Leibniz insists that the human mind 'expresses God and the universe, and all essences as well as all existences' (DM 26, G IV 451: WF 78). When God understands what it is to be a triangle by reflecting on his own nature, this fact about God must be expressed in the human mind; there must be a perception of what it is for God to understand the nature of triangularity in this way. One may doubt, however, whether such an account could explain how we come to conscious understanding of, say, the nature of triangularity, for expression can certainly be unconscious. One might also question whether on this analysis it is really the mind's capacity for reflection on its own nature that explains having the ideas in question. On this interpretation, the 'reflection account' is in danger of collapsing into dispositional nativism.

17   Cf. *Monadology* 30 (G VI 612: WF 272): 'And in this way, by thinking of ourselves, we think of being, of substance, of simples and composites, of the immaterial—and, by realizing that what is limited in us is limitless in him, of God himself. And so these *acts of reflection* provide the principal objects of our reasonings.' Here Leibniz seems to provide a different explanation that does not appeal to the fact that infinity is in some sense a property of our minds.

is highly relevant to ethics. For Leibniz embraces a eudaemonistic ethics, and he defines happiness as lasting pleasure (Gr 487). But how does reflection on the mind's nature allow us to acquire the idea of pleasure? Here it is useful to remember that Leibniz defines pleasure as a feeling (*sentiment*) of perfection (NE II.xxi.41, A VI.6: RB 194). It seems possible, then, that by reflection on itself, the mind is aware of, or senses, its perfections; that is, it experiences pleasure. By becoming self-conscious about its pleasure, the mind thereby acquires the concept of pleasure, a concept that plays a foundational role in ethics.

It would be foolish to pretend that such strategies for extending the 'reflection account' are likely to satisfy a modern analytic philosopher such as Mackie; they depend on assumptions and theories, such as the idea of the eminent possession of a property, that he would no doubt regard as dubious or antiquated. But enough has been said to show that within his system Leibniz has the resources to extend the 'reflection account' to the ideas of mathematics, theology, and ethics. In any case, the other points remain: the 'reflection account' has certain advantages over the dispositional version of nativism for which Leibniz is more famous.

Leibniz's theory, or theories, of nativism reveal a fascinating combination of Platonic and non-Platonic elements. Like Plato, Leibniz believes that any adequate conception of the dignity of the human mind must involve both metaphysical and epistemological elements: the mind is a simple, immaterial, and naturally immortal substance that is endowed with innate ideas and knowledge. Like Plato, too, Leibniz believes that there are logical links between these doctrines. But Leibniz reverses the direction of the argument; he argues from metaphysics to theory of knowledge. Leibniz seems to have believed strongly that the proper method in philosophy is to begin with an adequate account of the nature of substance, and to progress from there to truths about the nature of knowledge. In this respect Leibniz is set apart from his distinguished predecessors in the nativist tradition; he has affinities not with Plato and Descartes but rather with his older contemporary Spinoza. Whether this is a case of direct influence or simply a fortuitous convergence of philosophical paths cannot be answered within the scope of this paper.

Lennon on Descartes and Skepticism

José R. Maia Neto

1　Introduction

In *The Plain Truth: Descartes, Huet and Skepticism*,[1] Thomas Lennon criticizes Popkin's influential view of Descartes's relation to skepticism, which he calls the "standard interpretation." This interpretation consists of two central claims: (1) that Descartes's philosophical project was largely motivated by the need, posed by the *crise pyrrhonienne* of his time, to provide an unshakable refutation of skepticism, and (2) that Descartes's attempt failed, and he was a skeptic despite himself, as attested by his first readers (notably, Gassendi and then Huet). In what follows I discuss selected aspects of Lennon's criticism of Popkin's two claims, which are found argued for respectively in Popkin's *History of Scepticism* (2003) in the chapters entitled "Descartes Conqueror of Skepticism" and "Descartes *Sceptique Malgré Lui*."[2] Concerning the first claim about the aim of Descartes's philosophical project, I make a couple of remarks in favor of Popkin's view, but nonetheless side in favor of Lennon's criticism. Concerning the second claim of Descartes's failure and inadvertent championing of skepticism, I do not take a stand on Lennon's view of the soundness of Descartes's position vis-à-vis skepticism but, rather, I corroborate and add a suggestion to his view that Descartes does not stand against the skeptics,[3] but, on the contrary, that he is a methodological Academic Skeptic.[4]

2　Descartes as Conqueror of Skepticism

Popkin bases his view of Descartes as conqueror of skepticism on three kinds of evidence: 1) the fact that Descartes used skepticism in a way similar to the

1 Lennon, Thomas. *The Plain Truth: Descartes, Huet and Skepticism*. Leiden: Brill, 2008.
2 Popkin, Richard H. *The History of Scepticism from Savonarola to Bayle*. Oxford: Oxford University Press, 2003, pp. 143–173.
3 Curley, Edwin M. *Descartes against the Skeptics*. Cambridge: Harvard University Press, 1978.
4 The title of the last section of the last chapter of Lennon's book on Descartes is "Descartes as Methodological Academic Skeptic," *The Plain Truth*, pp. 242–244. Lennon supports and details this interpretation in "Descartes, Arcesilau e a estrutura da epokhé", *Filosofia e Educação* 25 (2011), pp. 37–62.

skeptics of his time but for anti-skeptical ends; 2) some texts in which Descartes claims that he intended to refute skepticism; and 3) the biographical episode related by Baillet of Descartes's reaction to a conference held in Paris in 1628 or 1629 by the chemist Chandoux.

1) Descartes is the central figure in Popkin's work on early modern skepticism. This centrality was somewhat obscured in the second edition of his *History of Scepticism* (from Erasmus to Spinoza) which is the most influential of the three editions of the work.[5] In the first edition, from Erasmus to Descartes,[6] Descartes appears as the culmination of an influential stream of thought that was revived in the Renaissance. Popkin offers a comprehensive intellectual context that makes quite clear that Descartes's method of doubt was not an isolated invention but could only be conceived against a background of intense interest in skepticism.[7] Popkin shows that skepticism played a more important role during the 150 years from the mid sixteenth to the late seventeenth century than during the almost 400 years of its Hellenistic period from Pyrrho of Elis to Sextus Empiricus. Scholarship on early modern skepticism has developed substantially since Popkin's seminal work.[8] Scholars have detailed and

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5 Popkin, Richard H. *The History of Scepticism from Erasmus to Spinoza*. Berkeley: University of California Press, 1979.

6 Popkin, Richard H. *The History of Scepticism from Erasmus to Descartes*. Assen, Netherlands: Van Gorcum, 1964.

7 The second edition, from Erasmus to Spinoza, reflects Popkin's new interests at the time, viz. Spinoza and bible criticism, which could only integrate the scholarship on skepticism by a too large and imprecise understanding of 'skepticism'. This fracture in Popkin's skeptical picture of early modern philosophy is compensated in the last 2003 edition, which carries this history to the late seventeenth century, when Cartesianism is again at the center of the picture.

8 A sample of this scholarship from just the past decade include collected volumes such as: Sihvola, Juha, ed. *Ancient Scepticism and the Sceptical Tradition*. Helsinki: Acta Philosophica Fennica, 2000; Moreau, Pierre-François, ed. *Le Scepticisme au XVIe et au XVIIe Siècle*. Paris: Albin Michel, 2001; Artigas-Menant and McKenna, Antony, eds. *Le doute philosophique: philosophie classique et littérature clandestine*, special issue of *La Lettre Clandestine* 10, 2001; Paganini, Gianni, Benitez, Miguel, and Dybikowski, James, eds. *Scepticisme, Clandestinité et Libre Pensée*. Paris: Honoré Champion, 2002; Paganini, Gianni, ed. *The Return of Skepticism from Hobbes and Descartes to Bayle*. Dordrecht: Kluwer. 2003; Maia Neto, José R., and Popkin, Richard H., eds. *Skepticism in Renaissance and Post-Renaissance Thought: New Interpretations*. Amherst, N.Y.: Humanity Books, 2004; Bernier, Marc André, and Charles, Sébastien, eds. *Scepticisme et Modernité*. Saint-Étienne: Publications de l'Université de Saint-Étienne, 2005; Charles, S., ed. *Le Scepticisme à l'Age Classique*, special issue of *Philosophiques*. 35:1, 2008; Gabriel, Frédéric, ed. *Le scepticisme Chrétien* (*XVIe–XVIIe siècle*), special issue of *Les Études Philosophiques*, Avril 2008; Maia Neto, José R., Paganini, Gianni, and Laursen, John Christian,

revised Popkin's interpretations of the philosophers mentioned in his *History of Scepticism* and have also included new primary figures such as Bruno and Campanella in this history. Therefore, although Popkin's interpretations of the various philosophers' relations to skepticism have been criticized, as has his "standard interpretation" of Descartes, his major contribution to the history of modern philosophy—to point out the relevance of the reappraisal of the ancient skeptical tradition in modern thought—has been corroborated and extended. Objections that have seemed to miss the mark have also been raised. For example, against Popkin's general theory about the revival of skepticism in modernity, it has been denied that there was any *crise pyrrhonienne* in the period.[9] However, at least part of this criticism results from taking "crise pyrrhonienne" too narrowly as psychological doubt, whereas what Popkin means (despite some unhappy expressions) is that typical skeptical problems such as how to justify beliefs and knowledge were living issues at the time. Another misguided objection is to argue that skepticism was not the central issue at the time but the crisis of Aristotelianism, or the revival of neo-Platonism or the birth of the new science. These and other intellectual and historical events rather favored the reappraisal of skepticism.[10]

Popkin makes clear a crucial difference between Hellenistic and Early Modern skepticism. In Antiquity, interest in skepticism was shown only by skeptics and anti-skeptics, whereas in the sixteenth and seventeenths centuries non-skeptics also showed interested in skepticism. Such non-skeptics were Counter-Reformers such as Hervet and Du Perron,[11] critics of Aristotle such as Sanches and Gassendi, neo-Platonists such as the young Ficino[12] and the

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eds. *Skepticism in the Modern Age. Building on the work of Richard Popkin*. Leiden: Brill, 2009; Paganini, Gianni, and Maia Neto, José R., eds. *Renaissance Skepticisms*. Dordrecht: Springer, 2009.

9   Ayers, Michael. "Popkin's Revised Scepticism." *British Journal for the History of Philosophy* 12:2 (2004), pp. 319–332; Perler, Dominik. "Was There a 'Pyrrhonian Crisis' in Early Modern Philosophy? A Critical Notice of Richard Popkin." *Archiv für Geschichte der Philosophie* 86 (2004), pp. 209–220; Maclean, Ian. "The 'Sceptical Crisis' Reconsidered: Galen, Rational Medicine and the *Libertas Philosophandi*." *Early Science and Medicine* 11:3 (2006), pp. 247–274.

10   One important historical event that favored skepticism was the discovery of the new world. See Marcondes, Danilo. "The Anthropological Argument: The Rediscovery of Ancient Skepticism in Modern Thought." In Maia Neto, Paganini and Laursen, eds., *Skepticism in the Modern Age*, pp. 37–53.

11   See Popkin, *The History of Scepticism*, p. 75.

12   See Granada, Miguel. "Apologetique platonicienne et apologie sceptique." In Moreau, Pierre-François, ed. *Le Scepticisme au XVIe et au XVIIe Siècle*, pp. 11–47.

Cambridge Platonists,[13] and promoters of the new science such as Descartes and Boyle.[14] According to Popkin, in the early modern period skepticism was used as a means to dogmatic ends, namely, to prepare for the reception of—or leap to—faith in a kind of negative *preambulum fidei*, as Harry Bracken has described it.[15] Reason helps faith not by proving the existence of God and the immortality of the soul but by showing that no certain knowledge at all is possible apart from revelation. Popkin's view that early modern skepticism is intimately associated with fideism has also been much challenged both through reinterpretations of philosophers Popkin considered fideists and through the inclusion of non-fideists in the skeptical picture.[16] Whatever the merits of these criticisms, the relevant point here is that Popkin's general thesis about early modern uses of skepticism and more specifically about Descartes's use of it remains intact. Descartes's use of skeptical doubt shared one thing with the fideists': the aim to clean the mind of acquired beliefs. However, Descartes's aim was anti-skeptical and here he parted ways with the fideists. Descartes's aim was to find a demonstration of God's existence, and in doing so, attempts to provide a refutation of skepticism.

2) Lennon carefully reviews the texts where Descartes refers to the skeptics and finds no evidence that refuting skepticism was considered by him as an important part of his philosophical project.[17] Descartes does claim that he refutes skepticism but, as Lennon notes, only when pressed by the charge or insinuation that he was introducing skeptical views (CSM 1:309) or that he

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13   See Hutton, Sarah. "Henry More, John Finch, and *The History of Scepticism*." In Maia Neto and Popkin, eds., *Skepticism in Renaissance and Post-Renaissance Thought*, pp. 43–64.

14   See Maia Neto, José R., and Pereira Maia, Elene C. "Boyle's Carneades," *Ambix* 49:2 (2002), pp. 97–111.

15   Bracken, Harry M. "Bayle's attack on natural theology: the case of Christian Pyrrhonism," in *Scepticism and Irreligion in the Seventeenth and Eighteenth Centuries*, R.H. Popkin and Arjo Vanderjagt (eds.). Leiden: Brill, 1993, pp. 254–266.

16   An example of the first strategy is Giocanti, Sylvia. *Penser l' irrésolution: Montaigne, Pascal, La Mothe Le Vayer*. Paris: Honoré Champion, 2001. An example of both strategies is Naya, Emmanuel. "Renaissant Pyrrhonism: a Relative Phenomenon." In Paganini and Maia Neto, eds., *Renaissance Skepticisms*, pp. 13–32.

17   Lennon, *The Plain Truth*, pp. 62–77. Usually Descartes refers to "the skeptics." On some occasions Descartes refers specifically to the Pyrrhonians (twice in *The Search for Truth*: CSM II:408 and 413, and once in a letter to Reneri through Pollot: AT II:38). On one occasion he refers specifically to the Academics (Second Replies: CSM II 94). CSM stands for *The Philosophical Writings of Descartes*, tr. by John Cottingham, Robert Stoothoff and Dugald Murdoch, 2 vols. Cambridge: Cambridge University Press, 1985. AT stands for *Oeuvres de Descartes*, ed. by Charles Adam and Paul Tannery, 11 vols. Paris: J. Vrin, 1996.

could not satisfactorily reply to the skeptical doubts he raised or at least that his skeptical doubts were useless (CSM II:121 and 548). In some texts which are not replies to criticism—for instance the two references to the skeptics in the *Discourse*—Descartes contrasts the end of his doubt with that of the skeptics' (CSM I:125) and claims that he achieves certain truth that cannot be shaken by the skeptics (CSM I:127). But, as Lennon correctly points out, the fact that Descartes thought that his philosophy was immune to skeptical attack does not mean that he thought of it as a refutation of skepticism or even as a reply to skepticism. Another interesting point made by Lennon that downplays Descartes's claims that one of the reasons he raised skeptical doubts was to refute them is that if it is true that Descartes provides a demonstration against the deceiver God, he does not do anything similar with respect to the dream argument.[18] The very proof of the existence of an external material world in the Sixth Meditation is, according to Descartes's synopsis of this Meditation, much weaker than the demonstrative proofs of the existence of God and the immateriality of the soul (CSM II:11). Finally, Lennon points out that Descartes's references to the skeptics exhibit his disregard for them, his belief that either skepticism is not viable (the old *apraxia* charge) or that skepticism can be sustained only due to lack of attention or, worse, out of willfulness.[19]

Two of the texts in which Descartes refers to the skeptics deserve further comment. The first is the text Lennon recognizes as the strongest one in favor of the standard interpretation. In the Seventh Replies Descartes tells Bourdin that skepticism is stronger than ever (a claim, by the way, historically correct) and in need of response for the skeptics of his day do not doubt ordinary things (which they take as appearances) but the existence of God and the immortality of the soul, which for them, unlike ordinary things, are not apparent (CSM II:374–375). Lennon denies that this text supports the standard interpretation as follows:

> It is with respect only to these two issues that Descartes is prepared even to think about the skeptics, and he thinks about them only insofar as the skeptics think about them. Since the skeptics are crazy, confused, naïve, insincere, etc., he could reasonably ignore them altogether. 'But how will they regard him in the meantime?' They might take Descartes's silence, naturally enough, as an indication of his inability to refute them.

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18   "*Metaphyscially*, there is no distinction between dreaming and waking, so the initial doubt of the *Meditation* I is confirmed as a permanent state, or perhaps better, it is vindicated." Lennon, *The Plain Truth*, p. 131.

19   Lennon, *The Plain Truth*, p. 68.

> Or worse, of his unwillingness to do so. The problem, then, is not epis-
> temological, but religious, and ultimately moral … Undisciplined beliefs
> lead to undisciplined behavior. The ultimate concern, as in the reply to
> Bourdin, would be not skepticism, but libertinage. For Descartes not to
> respond to the skeptics, at least on these two issues, would be scandalous
> in the technical sense of the term: it would be a bad moral example.[20]

I don't think these religious and moral issues can be separated from the epis-
temological ones, as Lennon suggests. The need of replying to the "atheist
skeptics" (as Descartes calls those skeptics of his day in need of refutation)
cannot be set aside as a particular and marginal case in the context of the
whole *Meditations* or in the context of Descartes's philosophical project.[21]
Gianni Paganini has recently provided detailed evidence that the skeptics of
Descartes's time would not be abstract skeptics who raise philosophical doubts
about knowledge claims, but real ones who turned to skepticism not to fos-
ter fideism but to attack Christianity.[22] In other words, at least one important
branch of skepticism during Descartes's time would be libertine. This comes
up forcibly in the dedicatory letter to the Sorbonne where Descartes justifies
the whole *Meditations* by claiming that the lack of demonstrative proofs have
led unbelievers to deny the existence of God and the immortality of the soul
and consequently to challenge morality (CSM II:3). The paradoxical upshot is
that if Popkin's view of the general form of the skepticism of the time is wrong,
that is, if this skepticism is not mainly fideist but mainly atheist or libertine,
then his interpretation of Descartes as attempting to conquer skepticism *gains*
plausibility.

    The second text to comment on comes from the Second Replies. When
Descartes justifies the need of the first two Meditations he says that he had
since long—I quote the standard English translation—"seen many ancient
writings by the Academics and Sceptics on this subject, and was reluctant
to reheat and serve this precooked material." (CSM II:94) This English trans-
lation is misleading in two respects. First, Descartes refers to books written

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20   Lennon, *The Plain Truth*, p. 72.

21   The passage under examination is cited by Gianni Paganini as the stronger evidence
      that responding to the skeptics was crucial for Descartes (cf. Paganini, Gianni. *Skepsis. Le
      débat des moderns sur le scepticisme*. Paris: Vrin, 2008, pp. 241–248). Popkin opens his first
      chapter on Descartes referring to this same passage, see Popkin, *The History of Scepticism*,
      p. 143.

22   Paganini, *Skepsis*, pp. 248–263. According to Paganini, the main atheist skeptic of
      Descartes's time is La Mothe Le Vayer.

by many Academics and Skeptics ["libros...complures ab Academicis & Scepticis scriptos" (AT VII:130)] not to *ancient* books written by Academics and Skeptics as the passage has been understood.[23] There is no reason to restrict these Academics and Skeptics whose books Descartes saw to the ancient philosophers,[24] especially given that there were many more early modern than ancient skeptical books available. If we restrict to the ancients, Descartes could have seen only three books, not many as he says, namely those of Sextus, which I think he did not see, and Cicero's *Academica*, which I agree with Lennon he probably read.[25] But if we include the period from the mid-sixteenth to the mid-seventeenth century then the skeptical library is considerably enlarged.[26]

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23   Groarke, Leo. "Descartes' First Meditation: Something Old, Something New, Something Borrowed," *Journal of the History of Philosophy* 22:3 (1984), pp. 281–301, p. 297; Fine, Gail. "Descartes and Ancient Skepticism: Reheated Cabbage?" *The Philosophical Review* 109:2 (2000), pp. 195–234, p. 200; Bermúdez, José Luis. "The Originality of Cartesian Skepticism: Did It Have Ancient or Mediaevel Antecedents?" *History of Philosophy Quarterly* 17:4 (2000), pp. 333–360, p. 342.

24   See Paganini, *Skepsis*, p. 253.

25   There are two reasons why I think Descartes did not see Sextus's books. First, Sextus' works were diffused only among expert scholars and skeptics and secondly, there is no single text in Descartes directly reminiscent of Sextus. The situation is otherwise on these two grounds with respect to Cicero's *Academica*. See, among others, Curley, Edwin. *Descartes against the Skeptics*, pp. 58–69; Burnyeat, Myles. "Idealism and Greek Philosophy: What Descartes Saw and Berkeley Missed," *Philosophical Review* 91 (1982), pp. 3–40; Williams, Michael. "Descartes's Metaphysics of Doubt," in *Essays on Descartes' Meditations*. Rorty, Amelie (ed.). Los Angeles: University of California Press, 1986, pp. 117–139; Groark, Leo. "Descartes' First Meditation; Something Old, Something New, Something Borrowed"; Lennon, Thomas. "Descartes, Arcesilau e a estrutura da epokhé."

26   Descartes certainly read Charron's *De la Sagesse*. He probably read Montaigne's *Essais* and probably at least one of François de La Mothe Le Vayer's numerous skeptical works. See Mehl, Edouard. "La Question du Premier Principe dans *La Recherche de la Vérité.*" *Nouvelles de la Republique des Lettres*. 1999–1, pp. 77–97; Cavaillé, Jean-Pierre. "Scepticisme, tromperie et mensonge chez La Mothe Le Vayer et Descartes." In Paganini, ed. *The Return of Scepticism*, pp. 115–131 and Paganini, *Skepsis*, pp. 248–270. Descartes refers to Montaigne and Charron in a letter to Newcastle of 23 November 1646, AT IV:573, and to La Mothe Le Vayer's *De l'instruction du Dauphin*. Paris: S. Cramoisy, 1640, in a letter to Mersenne of 28 October 1640, AT III:207. There are also textual indications that he read Sanches, Francisco. *Quod nihil scitur*. See the introduction by Elaine Limbrick to her English edition of Sanches' work, Cambridge: Cambridge University Press, 1988, pp. 82–85 and Paganini, Gianni. "Descartes and Renaissance Skepticism: The Sanches Case." In Maia Neto, Paganini, and Laursen, eds. *Skepticism in the Modern Age*, pp. 249–268; and Agrippa de Nettesheim's *De incertitudine et vanitate scientiarum*; see Mehl. "La Question

Secondly, Descartes does not say that he was "reluctant to reheat and serve this precooked material," which suggests that his relation to skepticism was external. A more literal translation of the passage "crambem non sine fastidio recoquerem" (AT VII:130) would be something like "it was not without a sickness to my stomach that I re-cooked this cabbage." *Crambe* (cabbage) stands here for something of bad taste and *recoquere* may have the figurative meaning of digesting (or re-digesting) thoughts, thinking something through again (for instance, for a different purpose). If we bring the modern skeptics to the picture, then a different reading of Descartes's rehearsal of these skeptical writings can be provided. Certainly the main single skeptical writing he re-cooked was Charron's *De la sagesse* (I give further evidence below): "L'esprit foible ne sçait pas posseder la science . . . il . . . demeure esclave sous elle, comme l'estomach foible chargé de viandes qu'il ne peut cuire ny digerer . . . L'esprit fort et sage la manie en maistre . . . fortifie sa lumiere naturelle."[27] Charron refers to the skeptical arguments that lead to wisdom as tough thoughts that weak minds cannot entertain.[28] Descartes's doubts in the First Meditation are similar cabbages. He quotes Charron in the *Discourse* when he claims that the decision to doubt everything should not be taken neither by vulgar men nor by pedants (CSM 1:118).[29] So I disagree with Lennon's interpretation of this passage.[30] The doubt of the moderns (Charron's) which were re-cooked by Descartes (radicalized, philosophically universalized) were not stale repetition but something

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du Premier Principe . . .," pp. 95–96. He may also have read Gassendi's *Exercitationes adversus Aristoteleos* and Gianfrancesco Pico della Mirandola's *Examen vanitates doctrinae gentium*.

27   Charron, Pierre. *De la sagesse*. Paris: Fayard, 1986, p. 38. The Duke de Luynes translates Descartes's passage as follows: "ce ne fust pas sans quelque dégoust que ie remâchois une viande si commune" (AT IX:103). "Commune", which is not in Descartes's Latin original, can have the more neutral meaning of quite diffused, as the skeptical views were indeed among les "honnestes hommes": "Un honneste homme n'est pas oblige d'avoir veu tous les livres, ni d'avoir appris soigneusement tout ce qui s'enseigne dans les escholes . . ." AT X:495.

28   In his *Petit Traité de Sagesse*, where Charron summarizes the book and replies to criticism, he says that he swetened the second edition (1604): "Au reste certaines choses qui sembloient à aucuns trop cruës et courtes, ou rudes et dures pour les simples: car les forts relevez ont l'estomac assez chaud pour cuire et digerer tout, je les ay pour l'amour d'eux expliqué et addoucy en la seconde edition" (*op. cit.*, pp. 864–865).

29   Descartes's direct source for this passage, to which I return below, is chapter 43 of book I *De la Sagesse*, pp. 291–293.

30   Lennon, *The Plain Truth*, p. 63.

hard to digest so restricted to strong minds or stomachs, *des esprits forts* such as Descartes.[31]

3) Popkin's third kind of evidence is the Chandoux episode.[32] Descartes was invited to attend a lecture by Chandoux on his new supposedly anti-Aristotelian philosophy. Contrasting with the audience that enthusiastically applauded it, Descartes said that it was only probable and showed that whatever was only probable, even extremely probable, could be shown to appear false and vice-versa, what looked most improbable could be shown to appear true. Popkin takes the episode as the link between Descartes and the *crise pyrrhonienne* of the time: "Everything was open to question, to dispute, and only probabilities served as the foundations for the various theories being offered. This being the case, this meeting with Chandoux became the microcosm of the plight of the whole learned world."[33] Lennon rightly points out that it is very unlikely that Descartes became aware of skepticism only on this occasion (1628 or 1629) and cites Gaukroger who contests Popkin's Pyrrhonian interpretation of the episode. Gaukroger claims that there is no evidence that there were any epistemological issues in the debate, which concerned only natural philosophy,[34] a position that Lennon finds "an overstatement." Lennon says: "The very form of his comments indicates Descartes's interest in skepticism, not of the Pyrrhonian, but of the Academic sort."[35] Lennon is exactly right in pointing out that Descartes's procedure at the meeting "seems to have been a repetition of the Academic skeptic Carneades's celebrated performance in Rome, where he is supposed to have successfully argued a set of views on justice one day only to come back the next day to refute them."[36] What must be concluded

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31   Lennon's interpretation of this passage is strenghtened by its apparent link to Juvenal's *crambem*, which does mean stale repetition. But see Paganini for a possible reading of Juvenal's expression as meaning the retaking of some common and bad thing but to extract the antidote from the poison (*Skepsis*, p. 232).

32   Our only sources for this biographical episode are Borel, Pierre. *Vitae Renati Cartesii*, Paris: Joannem Billaine, 1656; Baillet, Adrien. *La Vie de Descartes*, 2 vols. Paris: Daniel Horthemels, 1691, vol. I, pp. 160–166; and a letter of Descartes's to Villebressieux (AT I:213), which Richard Watson finds suspect. See Watson, Richard. *Cogito, Ergo Sun: The Life of René Descartes*. Boston: David R. Godine, 2002, p. 144.

33   Popkin, *The History of Skepticism*, p. 146.

34   Gaukroger, Stephen. *Descartes: An Intellectual Biography*. Oxford: Clarendon Press, 1995, pp. 181–186.

35   Lennon, *The Plain Truth*, p. 74n46.

36   Ibid.

of this episode is the following: 1) Gaukroger and others[37] who deny any epistemological skeptical issues in the episode are wrong. 2) Part of their failure, I suspect, is due to Popkin's influence, for he referred only to Pyrrhonian skepticism, neglecting Academic skepticism, though we must acknowledge that Popkin saw that Descartes "rose…to give…[Chandoux's learned audience] a lesson in skepticism."[38] 3) Lennon is right in bringing attention to the relevance of Academic skepticism: Descartes argued *in utramque partem* (which was characteristic of the Academics) and, moreover, he apparently did so using a sorites type of argument,[39] which, again, was characteristically employed by the Academics. Finally, Descartes's aim in arguing the way he did was to combat probability taken epistemically (the case of Chandoux's natural philosophy according to Descartes). Descartes thus agrees with Carneades's disciple Clitomachus who argued that the doctrine of his master (probabilism) should be taken only as a rule of action and not epistemically, as it was interpreted by Metrodorus, another member of the Academy.[40] 4) Descartes does not just reheat an old cabbage in the episode. He innovates with respect to Carneades and Clitomachus to the extent that he points out the danger of probability, which induces assent in the absence of ascertained evidence. Probability must be combated in the search for truth because it induces precipitate assent to doctrines that can be false. This is the central point of the Chandoux episode that was crucial in the development of Descartes's philosophy. Though precipitation was denounced by the ancient skeptics, Charron is the more immediate source for he insists that the wise man must have a *esprit fort* in order to resist assenting to what looks probable. For, in giving such assent he becomes open to error, what the wise man should above all avoid.[41] The episode shows that

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37   Sacada, Jorge. *Cartesian Metaphysics. The Late Scholastic Origins of Modern Philosophy*. Cambridge: Cambridge University Press, 2000, pp. 38–41.

38   Popkin, *The History of Skepticism*, p. 146.

39   Descartes asked somebody in the audience to propose him "telle verité qu'il luy plairot, & qui fut du nombre de celles qui paroissent les plus incontestables. On le fit, & avec douze argumens tous plus vray-semblables l'un que l'autre, il vint à bout de prouver à la compagnie qu'elle étoit fausse." Then Descartes did exactly the same with something which was proposed to him as "une Fausseté de celles que l'on a coutume de prendre pour les plus évidentes" (Baillet, Adrien. *La Vie De Monsieur Des-Cartes*. New York: Garland, 1987, reprint, vol. I, p. 162).

40   Cf. Cicero's *Academica* II.78. For Descartes probability is necessary only on the practical realm, which includes natural philosophy (not in its most general laws) and has to be rejected in metaphysics.

41   "examinant toutes choses qui se proposent…aymans mieux douter et tenir en suspens leur creance, que par une trop molle et lasche facilité, ou legereté, ou precipitation de

skepticism on this occasion (but with Lennon, Academic skepticism, and to be still more precise, Charronian Academic skepticism) was not the dragon to be defeated or even dominated, but the position held provisionally by Descartes himself.

3   Descartes as Skeptic Despite Himself

I have little additional comment to make on Descartes's being a skeptic *malgré lui* in Popkin's sense that Lennon strongly denies: that his attempted refutation of skepticism failed leaving him with the skeptical doubts of the First Meditation despite himself. I agree with the following arguments provided by Lennon: 1) since refuting the skeptics was not an important goal of Descartes's, failing to do it would not be a major failure of his philosophy; 2) it is inaccurate to charge Descartes with a failure to respond to the problem of justifying a criterion of truth, since he is a kind of intuitionist; 3) even if Descartes had to reply to skepticism and had failed to do so, this would not make him a skeptic *malgré lui*. Instead, I am more interested in Lennon's view that Descartes was a methodological Academic skeptic, not *malgré lui*, but willingly.[42] I begin by raising a problem for this view, then provide a way to bring the Academic skepticism closer to Descartes's time, and thereby suggest a way to solve the aforementioned problem.

The subtitle of Lennon's book is "Descartes, Huet, and Skepticism." This might lead one to think that the book is on Descartes and Huet on skepticism if it were not for the title—THE PLAIN TRUTH—which shows clearly enough—at least for those familiar with Huet's philosophy—that the book is actually on Descartes.[43] The title engages Huet polemically, for if a phrase can summarize Huet's philosophy, this phrase would be THE OBSCURE TRUTH. If Popkin is Lennon's main target among early modern scholars, Huet is his main target

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jugement, se paitre de fausseté, et affirmer ou se tenir asseurez de chose, de laquelle ils ne peuvent avoir raison certaine" (Charron, *Sagesse*, p. 292). See Maia Neto, José. "Charron's Academic Sceptical Wisdom." In Paganini and Maia Neto, eds., *Renaissance Scepticisms*, pp. 213–227.

42   Lennon details and justifies this view in Lennon, Thomas. "Descartes, Arcesilau e a estrutura da epokhé." *Filosofia e Educação* 25, 2011, pp. 37–62.

43   The subtitle may also suggest that Descartes's relation to skepticism was thought over by Lennon by critically reacting to Huet's reaction to it in the *Censura Philosophiae Cartesianae*, edited, translated to English, annotated and introduced by Lennon, Thomas. Huet, Pierre-Daniel. *Against Cartesian Philosophy. Journal of the History of Philosophy Book Series*. Amherst, NY: Humanity Press, 2003.

among early modern critics of Descartes: both Popkin and Huet held quite similar mistaken views of Descartes's philosophy and his relation to skepticism and both are, according to Lennon, Pyrrhonian skeptics and therefore supporters of a philosophical position Descartes despised.[44]

The phrase "the obscurity of truth" appears in a crucial passage of Cicero's *Academics*, which explains why Arcesilas introduced *epoche* in Plato's Academy. "It was entirely with Zeno, so we have been told, that Arcesilas set on foot his battle, not from obstinacy or desire for victory . . . but because of the obscurity of things [*rerum obscuritate*]."[45] This poses a challenge to Lennon's view of Descartes: how can the Academic skeptic be Descartes—for whom the truth is plain—and not Huet—for whom the truth is obscure? I have worked on Huet's skepticism and have suggested that it is closer to Academic skepticism than to Pyrrhonian skepticism, and more—that it is in fact Cartesian. This is the reason why Lennon critically examines my work on Huet in his book: he needs to dissociate Huet's skepticism from Academic skepticism and above all from Descartes's methodological Academic skepticism. He carefully goes through the arguments I offer to argue that if there is anything Cartesian in Huet's views, this Cartesianism can only be negative.[46] Lennon's main concern, I suspect, is to distinguish Huet's eventual derivation of a skeptical position from Descartes's philosophy from that found in Simon Foucher's derivation.[47]

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44 "As Popkin sees Descartes beginning as a dogmatist and ending as a skeptic (*malgré lui*), so . . . Huet see[s] him beginning as a skeptic and ending as a dogmatist. . . . Huet takes Descartes never to have lapsed into dogmatism, and to have deliberately, perhaps also as a result of his frail human nature, misrepresented his views in terms of dogmatism. . . . Descartes conveys two messages, only one of which, the hidden message, has any philosophical justification. . . . Descartes deliberately hides this message . . . to avoid the embarrassment of his project's failure. Thus, for Huet, as for Popkin, Descartes is really a skeptic *malgré lui*. They differ only with respect to Descartes's intentions in his published work. Popkin takes the published work to be, though a failure, Descartes's actual view; Huet takes it to be a failure, but one that is designed to hide Descartes's actual view. The very complication and nuance of these interpretations is an indication that there are problems with the standard interpretation" (Lennon, *The Plain Truth*, pp. 61–62).

45 Cicero, *Academica*, translated by H. Hackam for the Loeb Classical Library, I.44 (I slightly modify Hackam's translation). This passage belongs to the revised version of Cicero's book, most of which unfortunately disappeared. What has survived in its entirety is the first part of Cicero's first version of the book, known as *Luculus*.

46 Lennon, "Huet a Cartesian?", *The Plain Truth*, pp. 44–54.

47 I present Foucher's derivation in, "Foucher's Academic Cartesianism," published in a *Festschrift* edited by Lennon to Richard Watson—the pioneer in Anglo-American scholarship on late seventeenth century Cartesian skepticism, in: Lennon, Thomas, ed. *Cartesian Views. Papers Presented to Richard A. Watson*. Leiden: Brill, 2003, pp. 71–95.

I agree with Lennon that Foucher's and Huet's derivations of a skeptical position from Descartes's philosophy are very different. Since I was interested in pointing out how Descartes's philosophy led to a reappraisal of skepticism which was more Academic than Pyrrhonian, I stressed more their similarities than their differences.[48] I can cite here only briefly three major differences, one sociological, another religious and a third philosophical. First, as Lennon indicates, unlike Huet, Foucher was no erudite and apparently much closer to the Moderns than to the Ancients in the famous *querelle*. Furthermore, Foucher belonged to the circle of the "Cartesians" (whereas Huet was an external critic) and had at least the same right as Malebranche to be labeled a "Cartesian."[49] Secondly, unlike Huet, Foucher was no fideist. He believed that reason had an important role to play in morals and religion and even favored a kind of natural religion.[50] Third, Foucher went further than Huet with Descartes not only because he accepted methodic doubt and the cogito (Huet accepted only doubt) but also because he agreed with Descartes's project of combating materialism, detaching the mind from the senses and delivering intellectual truths. Foucher differs from Descartes less in the project and more in its execution. So he is much less a skeptic than Huet and much more Academic than him.[51] But why do I still want to claim that *Huet* is closer to Academic skepticism and even that he is a "sceptique cartésien"?[52]

One reason why Huet is closer to Academic skepticism is his view that truth is obscure. This enrolls him in the ancient tradition (arising with Democritus

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48   Popkin reacted thus to my view: "In a most interesting article, 'Academic Scepticism in Early Modern Philosophy,' *Journal of the History of Ideas* 58, no. 2, 1997, pp. 199–220, Jose Maia Neto tries to show that Foucher and Huet still admired the methodological contribution of Descartes, although they strove to destroy the ontological dogmatism he had presented. They thought the sceptical method, which Descartes started with, was an important part of philosophical study" (Popkin, *The History of Scepticism*, pp. 374–75n23).

49   Even if Watson is right and the story about Foucher giving Descartes's funeral oration in Paris is a legend, the legend itself is an indication of Foucher's association to the Cartesian circle. See Watson's introduction to his translation of *Critique de la Recherche de la Vérité*, in *Malebranche's First and Last Critics*, JHP Monograph Series, Carbondale: Southern Illinois University Press, 1995, p. 4.

50   See Foucher's books on Confucionism (*Lettre sur la morale de Confucius* and *De la Sagesse des Anciens*). One might argue that Huet also believed in natural religion, but this religion would be entirely historical, derived from Judeo-Christianity. See Huet's *Demonstratio Evangelica* and *Alnetanea Quaestiones*.

51   Note that the so called Academic skeptics did not call themselves skeptics nor even New Academics but just Academics.

52   Maia Neto, José R. "Descartes sceptique cartésien." *Philosophiques* 35:1 (2008), pp. 223–239.

and Socrates) that Cicero said led Arcesilas to combat Zeno, who was claiming the clarity of truth, whose criterion was clear and distinct sense perception (*phantasia kataleptike*). For Huet Descartes was right in showing with his doubt that truth is not plain to the senses but failed in assuming that it was plain to the intellect. In the passage on the *rerum obscuritate*, Cicero says that the "senses are limited" *and* "the mind feeble" (*imbecillos animos*) (Ac I.45). So Huet's own philosophy—presented in his *Traité philosophique de la foiblesse de l'esprit humain*—in its Latin original—*De Imbecillitate mentis humanae*—reiterates Cicero's passage.[53] I have shown elsewhere that this skeptical work of Huet's was originally conceived not as an independent work but as the first book of a much larger one, whose companion piece was titled *Censura Philosophiae Cartesianae* only when it was published as a separate book.[54] What became Huet's *Censura* was originally designed to be the second book of this larger work in which its title was *mentis humana imbecilitas ad veritatem percipiendam comprobatur Cartesianae Philosophiae*. The failure of Descartes is attested by the *mentis imbecilitas*. But Huet was not against reason. Not being able to get the truth, reason has a very important role to play in philosophy,[55] namely, to avoid error, precisely by showing that we cannot attain the plain truth, reserved to the "Bien-heureux" in heaven.[56]

To what extent is this position Cartesian? To a very small extent, I recognize, but nonetheless a relevant one. First, a biographical fact: Huet became acquainted (and favorably impressed) with Descartes's philosophy very early at school, about fifteen years before he became acquainted with the Pyrrhonian writings of Sextus Empiricus.[57] Second, a philosophical fact: the philosophy of the *Traité philosophique* is exactly Descartes's skeptical alternative mentioned at the end of Meditation I: "I shall stubbornly and firmly persist in this

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53   This original Latin text was published by Du Sauzet in Amstedam in 1738.

54   Maia Neto, José R. "Charron and Huet: Two Unexplored Legacies of Popkin's Scholarship on Early Modern Skepticism," in *The Legacies of Richard Popkin*, Popkin, Jeremy (ed.). Dordrecht: Springer, 2008, pp. 155–173.

55   I disagree with Lennon's view that Huet disparaged reason in favor of authority (except the authority of the Bible), for I see the argument from authority of philosophers and theologians (chapter 15 of book I of the *Traité Philosophique de la Foiblesse de l'Esprit Humain*, Hildesheim: Olms, 1974, reprint of the 1723 Amsterdam edition) as a reiteration of Cicero's claim that traditional wisdom attests the view of the *imbecillos animos*. This authority does not replace the many skeptical arguments presented in the book, but give more probability to a view which, of course, can be only probable.

56   Huet, *Traité Philosophique*, p. 16.

57   Huet, *Memoirs*, tr. Charles Nisard, Toulouse: Societé de Litteratures Classiques, 1993, p. 16 and p. 90.

meditation; and, even if it is not in my power to know the truth, I shall at least do what is in my power, that is, resolutely guard against assenting to any false-hoods" (CSM II, 15). Huet stubbornly remains in the First Meditation, strongly attacking Descartes's step towards the cogito in the Second Meditation, which was for him a precipitate step.[58] The philosophy of the *Traité* has two ends, one immediate and another mediate. The immediate one is to avoid error; the mediate one is to prepare for the acceptance of revelation.[59] Only by having the first can we get to the second for any full assent to something as plain truth is to opine since man can achieve the plain truth only through revelation.

Academic skepticism from Arcesilas to Carneades is usually subsumed under two theses: 1) that nothing can be known, and 2) that the wise man should sus-pend judgment about everything (*epoche*).[60] In the paper mentioned above, Lennon denies that the Academic skeptics hold thesis # 1 and argues that *epoche* is not a psychological but a logical or methodological concept. His point is that Arcesilas combated rashness in philosophical inquiry and that he did not hold the dogmatic view that nothing can be known. He combated assent to what is not evident to reason, which is properly to opine, on the grounds that such assent would compromise intellectual integrity. Lennon's view of the Academics is partially vindicated by Pierre Coussin's dialectical interpretation of these two theses.[61] The position of the Academics is that nothing can be known *according to the Stoic criterion of knowledge*, namely *phantasia kata-leptiké*, which is a clear and distinct sense perception caused by a real object and exactly like this real object.[62] If Coussin's dialectical interpretation is cor-rect, denial of the *Stoic* criterion of truth does not commit the Academic to the view that no truth is available to human beings. Moreover, on Coussin's

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58   Lennon examines Huet's objections to the cogito in detail in chapter 3 ("Thoughts"), *The Plain Truth*, pp. 79–105.

59   "Or ce Systême a pareillement deux fins, l'un prochaine, & l'autre éloignée. La fin pro-chaine, est d'éviter l'erreur, l'opiniâtreté, & l'arrogance. La fin éloignée, est de preparer l'Esprit à recevoir la Foi." Huet, *Traité Philosophique*, pp. 209–212.

60   See for instance, A.A. Long and D.N. Sedley, *The Hellenistic philosophers*. 2 vols., Cambridge: Cambridge University Press, 1987, vol. 1, p. 446.

61   Couissin, Pierre. "The Stoicism of the New Academy," in *The Skeptical Tradition*, Burnyeat, Michael (ed.). Berkeley: University of California Press, 1983, pp. 31–63 and "L'origine et l'évolution de l'époche." *Revue des études grecques* 42 (1929): 373–397. Coussin's view is only partially consistent with Lennon's because the former holds that the Academics held no doctrine at all.

62   A third condition was added by the Stoics in response to Academic criticism: a cognitive impression is such that could not occur if it were not caused by the real object that it represents.

interpretation, *epoche* is the result of the Stoic commitment to the view that the wise man should assent only to the cognitive impression. If the Academics show there is no such impression, the Stoic is obliged by his own principles to universal suspension of judgment. Lennon points out that there is nothing in the sources indicating that the Academics claimed that truth is unachievable or to the effect that they suspended judgment about everything. On the contrary, there is the legend of an esoteric doctrine held by the Academics (reported by Sextus as an attack on the Academics and by Augustine as a defense of the Academics), which would be straightforward Platonism.[63] Lennon argues that Academic *epoche* is compatible with assent, provided only that this assent be fallibilist, always open to revision. This is how he interprets the Academics and Descartes. The French Academic skeptic differs from his Hellenistic predecessors basically in separating out these doctrines. If Lennon is right, Foucher is the late seventeenth century philosopher whose philosophical orientation (broadly regarded) came the closest to Descartes's, though Foucher failed to see that Descartes was thoroughly an Academic, so in no need of correction.[64]

I turn now to the Academic skepticism of Descartes's time, which strengthens Lennon's interpretation. I have elsewhere called attention to a most revealing—and, at first sight, puzzling passage of Descartes's.[65] It appears in the opening paragraph of the unfinished dialogue *La Recherche de la Vérité*:

> Mais il est entré ignorant dans le monde, et la connaissance de son premier âge n'étant appuyée que sur la foiblesse des sens et sur l'autorité des précepteurs, il est presque impossible que son imagination ne se trouve remplie d'une infinité de fausses pensées, avant que cette raison en puisse entreprendre la conduite: de sorte qu'il a besoin par après d'un très grand *naturel*, ou bien *des instructions de quelque sage*, tant pour se défaire des mauvaises doctrines dont ils est préoccupé, que pour jeter les premiers fondements d'une science solide, et découvrir toutes les voies

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63 Cicero says that the Academics do not claim any such doctrine "in order . . . that our hearers may be guided by reason rather than by authority" (Ac II.60), which is a reason entirely consistent with Lennon's view of the Academics as radically opposed to authority. See Sextus' *Outlines* (PH I.234) and Augustine's *Against the Academics* II.24 and II.37.

64 Foucher thought Descartes needed correction basically because he wrongly thought that Cartesian extension was sensible and failed to notice that Descartes's proof of the existence of an external material world based on sense perception in Meditation VI was only probable, required in the practical and not in the metaphysical context.

65 Maia Neto, José R. "Charron's Epoche and Descartes's Cogito: The Skeptical Base of Descartes's Refutation of Skepticism." Paganini, ed., *The Return of Skepticism*, pp. 81–113.

par où il puisse élever sa connaissance jusques au plus haut degré qu'elle puisse atteindre (AT, x:496) (emphasis added).

In his edition of Descartes's philosophical works, Ferdinand Alquié finds "curieux" that the role of methodical doubt is in this passage attributed to a "très grand naturel" or "les instructions de quelque sage."[66] This wise man is Charron, the instructions are those of wisdom presented in book II *De la Sagesse*, whose title is precisely "regles et *instructions* generales *de la sagesse*" (emphasis added).[67] Wisdom can be acquired in two ways: "le *naturel*, et l'acquis" (emphasis added).[68] Charron refers to these two ways of acquiring wisdom in the chapter on three kinds of minds already mentioned.

> Cette … distinction … vient tant du naturel que de l'acquis; selon laquelle y a trois sortes de gens au monde…. En … le plus bas sont les esprits foibles et plats, de basse et petite capacité, nez pour obeir, servir, et étre menés…. Au second et moyen estage sont ceux, qui sont de mediocre jugement, font profession de suffisance, science, habilité; Mais qui ne se sentent et ne se jugent pas assés … Ces gens sont de l'eschole … d'Aristote; affirmatifs, positifs, dogmatistes … Au troisiéme et plus haut étage sont les hommes doües d'un esprit vif et clair, jugement fort, ferme et solide; qui ne se contentent d'un ouy dire, ne s'arrestent aux opinions communes et receuës … mais examinent toutes choses qui se proposent, sondent meurement, et cherchent sans passion les causes, motifs, et ressorts jusques à la racine, aymans mieux douter et tenir en suspens leur creance, que par une trop molle et lasche facilité, ou legereté, ou precipitation de jugement, se paitre de fausseté, et affirmer ou se tenir asseurez de chose, de laquelle ils ne peuvent avoir raison certaine.[69]

Charron's distinction of three kinds of minds (*esprits*) is taken by Descartes in the second part of the *Discourse*, in a passage adumbrated in the *Regulae* (CSM I:50) and recalled in the Seventh Replies (CSM II:320).

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66   Descartes, René. *Oeuvres philosophiques*, 3 vols., F. Alquié (ed.). Paris, Bordas, 1992, vol. II, p. 1106n2. CSM (II 400), probably to avoid the puzzle, take "naturel" and "sage" as adjectives to, respectively, "talent" and "teacher," nouns which are absent from the text.

67   Descartes says in the "Olympian matters" that "The pronouncements of the learned can be reduced to a very small number of general rules" (CSM I 5). "Dicta *sapientum* ad paucissimas quasdam *regulas generales* possunt reduci" (AT X 217) (emphasis added).

68   Charron, *De la Sagesse*, p. 37.

69   Charron, *De la Sagesse*, pp. 291–292.

The simple resolution to abandon all the opinions one has hitherto accepted is not an example that everyone ought to follow. The world is largely composed of two types of minds for whom it is quite unsuitable. First, there are those who, believing themselves cleverer than they are, cannot avoid precipitate judgments and never have the patience to direct all their thoughts in an orderly manner; consequently, if they once took the liberty of doubting the principles they accepted and of straying from the common path, they could never stick to the track that must be taken as a short-cut, and they would remain lost all their lives. Secondly, there are those who have enough reason or modesty to recognize that they are less capable of distinguishing the true from the false than certain others by whom they can be taught; such people should be content to follow the opinions of these others rather than seek better opinions themselves. (CSM I:118)

This passage explains the puzzling opening of *La Recherche de la Vérité*: the Cartesian philosophy, which begins with doubt, shall be pursued only by the same kind of minds in Charron who can acquire Academic skeptical wisdom through the instructions of book II. These are the *esprits forts*, strong enough to resist assenting to what is merely probable, that is, those who, unlike Chandoux's audience, have the will power to preserve intellectual integrity by resisting precipitate judgments.[70] This is the source of Descartes's first methodic rule in the *Discourse*: "never to accept anything as true if I did not have evident knowledge of its truth: that is, carefully to avoid precipitate conclusions and preconceptions" (CSM I:120). So Descartes appears here not against the skeptics, but starting with the skeptics of the Charronian kind who preserve themselves from error, precipitate judgments, by inquiring into everything and assenting to nothing which is not evident to reason.[71] The device of Wisdom is "Je ne sçai." This self of Charron's, the self of Socratic ignorance coupled with Academic skepticism, appears to be the most likely source of Descartes's cogito. Just look at the *Regulae*: "If . . . Socrates says that he doubts

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70   By *esprits forts* I do not mean libertines, a specific kind of *esprits forts* who doubt religious beliefs.

71   Freedom of mind is "the second disposition to Wisdom" (book II, chapter 2) (the first is an "Exemption et afranchissement des erreurs, et vices du monde, et des passions" (book II, chapter 1). This freedom involves "juger de tout" and "ne s'obliger a rien." Cicero says that Arcesilas' practice was to argue "against the opinions of all men, so that when equally weighty reasons were found on opposite sides on the same subject, it was easier to withhold assent" (Ac I.45).

everything, it necessarily follows that he understood at least that he is doubting, and hence that he knows something" (CSM I:46) and in the *Recherche de la Vérité*, where the first principle is not the more general "I think therefore I am" but "I doubt therefore I am" (CSM II:412–413). We can thus understand Descartes's claim in the *Recherche* that Charron's Academic wisdom can be used not only to get rid of previous opinions but also "to lay the foundations for a solid science" (CSM II:400).

But here the similarities end and the big difference is revealed. For Charron—as for Montaigne—truth is hidden in God so we cannot attain it. Because evident truth can never appear to created limited minds, all we can do is to avoid error.[72] The Academic view of the *rerum obscuritate* is reinforced in this revival of Academic skepticism in Christian times, in which belief in an omnipotent and wholly transcendent God makes truth still more obscure to finite human beings. Gassendi, who was one of the main admirers of Charron's,[73] presents exactly this ancient Academic tradition of the *rerum obscuritate* related by Cicero against Descartes's general rule of clarity and distinction. "Admittedly this may be the best rule that it was possible to find when everything was shrouded in so much darkness. But when we see that many great thinkers, who ought surely to have perceived very many things clearly and distinctly, have judged that the truth of things is hidden either in God or in a deep well, is it not reasonable to suspect that this rule may lead us astray?" (CSM II:193)

4   Conclusion

To conclude, we have to correct Popkin—as I and Lennon have done—in showing that the most relevant type of skepticism in early modern philosophy is Academic not Pyrrhonian skepticism.[74] In doing so, we reject the first

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72   "la verité . . . [ne] se laisse . . . posseder à l'esprit humain. Elle loge dedans le sein de Dieu" (Charron, *De la Sagesse*, p. 138). Montaigne says in the *Apology for Raymond Sebond* (*Les Essais* II 12, ed. Villey-Saulnier, Paris: PUF, 2004, p. 541), that "la vraye raison loge dans le sein de Dieu."

73   In the preface to his *Exercitationes adversus Aristoteleos*, Gassendi says that it was "mei Charronii lectio" who gave him courage to face the Aristotelians. See Pierre Gassendi, *Dissertations en Forme de Paradoxes contre les Aristotéliciens*, bi-lingual French/Latin edition, Bernard Rochot (trans.). Paris: Vrin, 1959, p. 7.

74   This was objected to Popkin by Paul O. Kristeller who read the manuscript of the first edition of *The History of Scepticism*. See Jeremy Popkin, "Richard Popkin and His *History of Scepticism*" in Maia Neto, Paganini and Laursen, eds., *Skepticism in the Modern Age*, pp. 15–34.

part of the standard interpretation, that Descartes's philosophical project was largely motivated by the need, posed by the *crise pyrrhonienne* of his time, to provide an unshakable refutation of skepticism. The early seventeenth-century Academic context is much more promising to shed light on Descartes's relation to skepticism than the Hellenistic one. Historically, in the seventeenth century Charron's *Of Wisdom* was much more known than Cicero's *Academics*. One might say that to a large extent the former is the update of the latter: an Academic skeptical wisdom, basically inspired by Cicero's view, but tailored to the needs and issues of the time, among which the need to fight Aristotle's authority and promote intellectual freedom. Of course the disadvantage in bringing the proximate context is the strengthening of the Academic thesis that truth is hidden. But, as Lennon suggests, perhaps Descartes was the first Academic to speak out these esoteric truths. Maybe he discovered the conditions in which these intellectual truths could be asserted without danger of precipitation, by prior and, as Lennon suggests in the paper, continuous subjection of them to hyperbolical doubt, an original and unique kind and use of doubt.[75]

Moreover, viewing Descartes as a methodological Academic skeptic brings into question the second pillar of Popkin's standard view—that Descartes's attempt failed, and he was a skeptic despite himself, as attested by his first readers. Instead of seeing Descartes as a skeptic despite himself, we can see Descartes's skeptical innovation within the Academic tradition. However, Descartes's view that truth is plain does look like a radical break in the Academic skeptical tradition. At least on this particular aspect, Huet is the main seventeenth-century carrier of this Hellenistic school of thought.

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[75]   Most scholars agree that Descartes's hyperbolical doubts, the deceiver and the dream, are not doubts entertained by the ancient skeptics. See the articles by Myles Burnyeat, Michael Williams and José Bermudez cited above. For a dissident view, see the articles cited above by Gail Fine and Leo Groark.

A Defense of Cartesian Clarity and Distinctness

Kurt Smith

In *The Plain Truth*, Thomas Lennon argues against the now-standard and long-standing reading of Descartes, which takes clarity and distinctness to be criteria for perceiving the truth.[1] One virtue of Lennon's reading is that it allows Descartes to avoid the charge of circularity. But in my opinion one defect of his reading is that it relegates clarity and distinctness to the proverbial dustbin. As Lennon puts it, "clarity and distinctness are dispensable terms whose only role is to make what is really a visual metaphor into what Ryle called a cognitive achievement word."[2] It was Ryle's view that when one finds the thing that one was seeking, for example, the finding was not some *additional* episode to the seeking. It was simply to succeed at seeking. "To find," as he would put it, is the correlated achievement or success word of the more basic task word "to seek".[3] Likewise, argues Lennon, "Perceiving the truth clearly and distinctly is not some mysterious additional episode. It is just perceiving the truth."[4] The upshot of Lennon's view is that, like the achievement word "to find," the phrase "to clearly and distinctly perceive" is simply Cartesian longhand for claiming that one has succeeded at perceiving, which is just another way of claiming that one perceives the truth. If we do not perceive the truth, the trouble stems from there being obstacles that stand in the way. "Descartes's whole philosophy," Lennon suggests, "might be understood as an attempt at identifying the obstacles and showing how they can be removed."[5] Once removed, nothing stands between the perceiver and the truth, and so an appeal to criteria is pointless. "The truth is right before our eyes, plain and obvious."[6] In what follows, I argue that although Lennon is right to reject a certain interpretation of what will be called the "criterion account," which arises from reading Descartes as forwarding what Lennon calls a "label" theory of true perception, Lennon goes too far in my opinion in claiming that clarity and distinctness are superfluous,

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1 Lennon, Thomas M. *The Plain Truth: Descartes, Huet, and Skepticism*. Leiden: Brill, 2008; hereafter Lennon, *The Plain Truth*, 2008.

2 Lennon, *The Plain Truth*, 2008, p. 169.

3 Ryle, Gilbert. *The Concept of Mind*. New York: Barnes & Noble, Inc., 1949; hereafter, Ryle (1949).

4 Lennon, *The Plain Truth*, 2008, p. 172.

5 Lennon, *The Plain Truth*, 2008, p. vii.

6 Lennon, *The Plain Truth*, p. vii.

dispensable terms. I offer a third possible reading of the matter, which I shall call the "enumeration account," and contend that clarity and distinctness signify two of the most hardworking concepts in Cartesian epistemology.

1   The Label and Model Theories

Lennon bases his philosophical[7] critique of the now-standard criterion account on an argument found in Pierre-Daniel Huet's 1689 *Censura Philosophiae Cartesianae*.[8] In it Huet attributes to Descartes what Lennon calls a label theory of true perception, which casts clarity and distinctness as criteria for perceiving the truth. Lennon describes the theory as follows:

> This kind of view takes a criterion to be a property attached to that of which it is the criterion, such that to find with certainty that of which it is the criterion, one looks for the label. One can be certain that a given individual is of a certain kind if it is seen to have a certain property had by all and only individuals of that kind.[9]

Clarity and distinctness are the properties that a perception must possess in order to be true, or to be of the truth.[10] They are, as the theory suggests, labels (i.e., properties or features). Thus, if one wishes to establish that one perceives the truth, one looks for these labels.

It is not crystal clear whether such properties are, in light of the label theory, supposed to be found among the *contents* of our ideas. Lennon's examination of the theory, however, strongly suggests that they are in fact to be taken as properties found *in* our ideas. Thus, when one has a clear and distinct

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7   I say *philosophical* in contrast to that part of Lennon's critique that focuses on the Latin texts and their subsequent English translation. This latter facet of Lennon's over all critique might best be cast as historical or scholarly in nature (as opposed to philosophical). For his historico-textual analysis, see Lennon, *The Plain Truth*, pp. 169–70. Although I do not address it here, I do address his textual concerns in Smith, Kurt. *Matter Matters: Metaphysics and Methodology in the Early Modern Period*. Oxford: Oxford University Press, 2010, specifically pp. 72–75.

8   Huet, Pierre-Daniel. *Censura philosophiae cartsesianae*. Paris: 1689. Lennon has recently produced an excellent English translation of the text, *Against Cartesian Philosophy*, in the JHP Book Series. New York: Humanity Books, 2003.

9   Lennon, *The Plain Truth*, p. 143.

10   Later, in Section III, I draw a difference between "being true" and "being of the truth," which will have some philosophical import for what I think is Descartes's view.

perception of a triangle, for example, according to the label theory one should be able to pick out in addition to certain (essential) properties that constitute the content of the idea—the property denoted by "three-sidedness," for example—two salient properties or features, namely, those denoted by the terms "clear" and "distinct". These properties or features, included in the idea's content, guarantee the perceiver that he or she perceives the truth.

Gassendi took issue with the above sort of view, briefly demanding that Descartes rework his grounds for accepting the truth-rule as forwarded in the Third Meditation, the rule that "whatever I perceive very clearly and distinctly is true."[11] Gassendi admits, in justifying the demand, that clarity and distinctness would certainly be enough to guarantee someone (at least on psychological grounds), that "if something appears to anyone to be the case then it *appears* to be the case."[12] But he insists that such criteria would not be enough to guarantee that what appeared to be the case was *in fact* the case. He recalls that when he was young that he was absolutely convinced about the truth of a certain mathematical proposition, only to discover later by way of considering several arguments "that the opposite was the case and that I [now] perceived it [i.e., the truth of this new proposition which contradicted the earlier one] even more clearly and distinctly."[13] So, what guarantees the truth-rule? As Lennon puts it, "What Gassendi wants is a method to pick out the truly clear and distinct perceptions, i.e., a criterion to justify Descartes's criteria."[14] If clarity and distinctness are criteria for perceiving the truth, what criterion can Descartes provide which guarantees that clarity and distinctness are indeed the criteria? Given that Descartes appears to offer no convincing reply to this demand, Gassendi's criticism looks to have done serious damage to the criterion account.

More damaging, according to Lennon, is the attack launched by Huet in his *Censura*, for it "contains the most comprehensive, unrelenting, and devastating critique of his [i.e., Descartes's] philosophy ever published."[15] Huet's criticism looks to share common ground with both Gassendi's criticism, just mentioned, and the criticism of circularity brought out by Arnauld in the Fourth Objection. Concerning the latter, Lennon identifies two circles, which he calls the "inner-circle" and the "outer-circle." The outer-circle is the circle

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11   Gassendi makes the demand at AT VII:279; CSM II:194–5. The truth-rule, quoted here, is found stated at AT VII:35; CSM II:24.

12   AT VII:277; CSM II:193, italics mine.

13   AT VII:278; CSM II:194.

14   Lennon, *The Plain Truth*, p. 172.

15   Lennon, *The Plain Truth*, p. viii.

made famous by Arnauld: roughly, what guarantees that clarity and distinctness are reliable epistemic criteria is the fact that God exists, is no deceiver, and is the author of our truth-identifying capacity. The circle is introduced once we say that what guarantees that we are justified in holding that God exists, is no deceiver, and is author of our truth-identifying capacity, is that we clearly and distinctly perceive these things.[16] According to Lennon, Huet is responsible for establishing the inner-circle, which is importantly different from Arnauld's outer-circle. Here, the inner-circle, which Lennon notes is perhaps better understood as a form of begging the question,[17] and in this sense looks to run closer to Gassendi's objection, is immediately introduced once we question whether our truth-identifying capacity is reliable. For, if what is in question is the reliability of one's truth-identifying capacity, then the very postulating of clarity and distinctness as criteria for identifying the truth, where the "postulating" is done *via* this very truth-identifying capacity, must itself be called into question. "The inner-circle," says Lennon, "is potentially more noxious because it would block knowledge altogether, whereas the outer circle would allow at least knowledge of one's own existence with the cogito."[18]

We avoid Huet's criticism, and arguably Arnauld's and Gassendi's, if we reject reading Descartes as forwarding the criterion account. Such an attempted defense was in fact offered, Lennon argues, by Pierre-Sylvain Regis in his 1691 *Réponse*. In the *Réponse* Regis argues against the label theory reading (i.e., against the criterion account), and proposes an alternative one, which Lennon calls a "model" theory. Regis writes:

> . . . clear and distinct perception and evidence are one and the same thing . . . the natural light, which is taken for the rule of truth, is not different from either evidence, or clear perception, or knowledge drawn from the thing itself . . . [Descartes] admits as true the proposition "I think, therefore I am," on the sole basis that it is known by the natural light; because this same proposition taken in general terms must serve as rule for all other natural truths.[19]

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16   For a clear discussion of this, see Newman, Lex, and Nelson, Alan. "Circumventing Cartesian Circles." *Nous*, Vol. 33, No. 3 (1999), pp. 370–404.

17   Lennon, *The Plain Truth*, p. 140.

18   Lennon, *The Plain Truth*, p. 141.

19   Régis, Pierre-Sylvain. *Réponse au Livre . . . Censura. . . .* Paris, 1691, pp. 81–82. I believe that the English translation quoted here is Lennon's, which is found in Lennon, *The Plain Truth*, p. 167.

The *cogito* compels assent. We cannot doubt its truth while we have the idea before our mind. According to Lennon, Regis sees the *cogito* as serving as the model for perceiving the truth. As seems clear in the above passage, Regis means by this that we take the *cogito*, "taken in general terms," as serving as a *rule* for perceiving the truth. What might this mean exactly? As I hope to show in what follows, a perception is clear and distinct whenever its content conforms in important ways to the *cogito*, where conformity in this context is conformity in ideational structure. One can produce this structural conformity when analyzing an idea by applying Descartes's method of enumerating. What will be important to see is that the *cogito* is clear and distinct because it too conforms to what I take to be the salient Cartesian ideational structure—all clear and distinct ideas, including the *cogito*, conform to what I will call the "master enumeration". That the cogito serves as the "model" within the context of the *Meditations*, I think, is simply due to its place in the order of discovery— it is "the first and most certain of all to occur to anyone who philosophizes in an orderly way."[20] I want to turn to sketching out this view with the aim of showing how it differs from Lennon's, my primary aim being to show the sense in which clarity and distinctness are *in*dispensable terms for Descartes.

2   Model and Rule

As noted in the previous section, the label theory casts clarity and distinctness as properties or features to be found in our ideas. Ideas that are clear and distinct have the labels, and so are of the truth. Consider, then, the adventitious idea of the sun (i.e., the sensory idea of the sun). Let the following suffice for sake of discussion: the idea exhibits the sun as being flat, circular-shaped, yellow, and hot. This idea, Descartes says, is obscure and confused. According to the label theory we might understand this as follows. There are properties or features included in the content of this adventitious idea picked out by the terms "circular-shaped" and "yellow," for instance, but there are no features included in the idea picked out by the terms "clear" or "distinct". Presumably, this is *why* the idea is obscure and confused. It fails to have the labels. But, contends Lennon, there is trouble lurking for this account. The trouble comes to light by way of a similar analysis of what is admittedly a clear and distinct idea. Consider, for example, the idea of a purely geometrical object such as a circle. We should be able to locate features, for example, picked out by "radius," "circumference," as well as entire phrases such as "all the radii of the circle are

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20   AT VIIIA:7; CSM I:195.

equal," and so on, but because this idea is clear and distinct, the label theory tells us that there must also be properties or features included in the idea's content picked out specifically by the terms "clear" and "distinct". But an examination of this idea will find no such features. Conjoined with the abovementioned criticisms of circularity, this last criticism, suggests Lennon, puts the final nail in the proverbial coffin of the label or criterion account theory.

In part based on Regis' insight, Lennon's reading allows Descartes to avoid Huet's devastating attack by reworking the concepts of clarity and distinctness. His first order of business is to remove them from the contents of ideas—and so they are no longer taken, as they are in the label theory, to be *objects* of perception—and to relocate them instead in the *acts* of perception. Lennon notes that the standard reading wrongly casts clarity and distinctness as substantives. This problematic reading has been exacerbated by the now-standard translation by John Cottingham. Lennon writes:

> Thus, in the most important text of all, the truth-rule paragraph of Meditation III, where Descartes says that the cogito would not be enough if something that he clearly and distinctly perceived should be false, Cottingham et al. have him perceiving with clarity and distinctness. Descartes himself could not have expressed himself in this way because there is no Latin for it. To be sure, there is *claritas*, but there is no substantive that is cognate with the adjective *distinctus* or the adverb *distincte*.[21]

Thus, the adverbial form of expression "to clearly and distinctly perceive X" is to be preferred over the problematic adjectival form "to perceive X with clarity and distinctness". This in turn aligns with Lennon's reading the adverbial phrasing in light of Ryle's distinction between achievement and task words, mentioned at the opening of this essay. Perceiving the truth will be an episodic achievement, which, as noted earlier, Lennon says is not some *additional* episode to perceiving—it is plainly and simply to perceive the truth. There are troubles, I think, with both the adverbial theory of clarity and distinctness and with Lennon's adoption of Ryle. Let me first say something about the latter.

Ryle introduces the distinction between task and achievement words in *The Concept of Mind*. He writes:

> Many of the performance-verbs with which we describe people and, sometimes with qualms, animals, signify the occurrence not just of actions but of suitable or correct actions. They signify achievements.

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21   Lennon, *The Plain Truth*, p. 169.

> Verbs like 'spell', 'catch', 'solve', 'find', 'win', 'cure', 'score', 'deceive', 'persuade', 'arrive' and countless others signify not merely that some performance has been gone through, but also that something has been brought off by the agent going through it. They are verbs of success.[22]

Within the context of a foot race, for example, the verb "runs" in "A runs the race" is an example of a task word, whereas "wins" in "A wins the race" is an example of an achievement word. "Winning" is a verb of success. Likewise, when looking for or seeking a thimble, the verb "looks" in "A looks for the thimble" is a task word, whereas "finds" in "A finds the thimble" is an achievement word. "Finding" is a verb of success. In order for someone to win the foot race, he or she must run the race.[23] But Ryle admits, ". . . there can be achievements which are prefaced by no task performances."[24] For example, one might find the thimble without first having looked for it. And, we might add, there may be tasks for which there is no culmination of success.

"One big difference between the logical force of a task verb and that of a corresponding achievement verb," Ryle claims, "is that in applying an achievement verb we are asserting that some state of affairs obtains over and above that which consists in the performance, if any, of the subservient task activity."[25] It is important to note, he goes on to say, that "When a person is described as having fought and won, or as having journeyed and arrived, he is not being said to have done two things, but to have done one thing with a certain upshot."[26] So, when he claims, as he does above, that in the achievement there is some state of affairs that obtains over and above that which consists in the performance, that which is taken to be "over and above" is not supposed to be any additional action to the action being performed; it is the "upshot" of performing the task. So, finding the thimble is not some additional act to seeking it; though, as he claims above, "finding" does denote something over and above one's seeking. Finding the thimble denotes the successful culmination of the seeking.

Ryle introduces a second distinction, this one between episodic and dispositional words, a distinction which complicates matters. Though related, this distinction is not identical with the distinction between task and achievement words. Verbs that describe activities are *episodic* words.[27] So, "seeks" in "A seeks the thimble" is an episodic word. Ryle's point is that finding the thimble is not

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22   Ryle, *The Concept of Mind*, p. 130.

23   Ibid., p. 150.

24   Ibid., p. 150.

25   Ibid., p. 150.

26   Ibid., p. 150.

27   Ibid., p. 149.

some *additional* episode to the seeking, it is simply the success of the seek-ing. All achievement words, then, are episodic words. Ryle contrasts episodic words to *dispositional* words.[28] Dispositional words describe an agent's hav-ing a *capacity* to do something. This is contrasted to episodic words, which describe an agent's being engaged (or even having been engaged) in the doing of some activity. A's running the race (an episode) presupposes A's capacity to run (a disposition). But A's capacity to run does not presuppose (or entail) that A ever runs. So, episodic words presuppose (entail) dispositional words, but not the other way around.[29] Even so, given that all achievement words are episodic words, and no episodic words are dispositional words, it follows that no achievement words are dispositional words.

Lennon focuses on Ryle's claim that certain perception verbs are not task verbs. That is, they are not, as Ryle says, performances or ways of being occupied.[30] Rather, perception verbs such as "to see" are achievement verbs.[31] But understood as achievement words, they are nevertheless episodic words. It would follow, as noted in the previous paragraph, that such verbs would not be dispositional words. These are contrasted to perception verbs such as "to observe" and "to look," where observing and looking are taken to be task verbs (and they are also taken to be episodic verbs).[32] Even so, Ryle allows "observe" to count as an achievement verb in some contexts.[33] Thus, depending on the context "observe" can be either a task or an achievement verb.[34] But in either case, it is an episodic word. At one point, Ryle looks to ultimately categorize sensing and perceiving as *capacities*, in which case the verb "to see" would seem to count as a dispositional word.[35] This would spell trouble for the view, for it would contradict Ryle's claim that no achievement verbs (because they are episodic words) are dispositional words.

Israel Scheffler has in fact argued that Ryle's category of achievement words is self-contradictory, though for slightly different reasons from those given above.[36] Scheffler's line of reasoning is based on Ryle's casting perception as an episodic achievement, as an instance of success, and at the same time as a

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28   Ibid., pp. 116*f.*

29   Ibid., p. 119.

30   Ibid., p. 151.

31   Ibid., pp. 152, 153.

32   Ibid., p. 204.

33   Ibid., pp. 152, 211.

34   Ibid., p. 222.

35   Ibid., pp. 204, 210.

36   Scheffler, Israel. "On Ryle's Theory of Propositional Knowledge." *Journal of Philosophy*, Vol. 65, No. 22 (1968), pp. 725–32. A further criticism of Ryle can be found in Scheffler, Israel. *Conditions of Knowledge*. Chicago: University of Chicago Press, 1983.

dispositional state.[37] In casting perception as a dispositional state, emphasis is placed on the underlying conditions that make possible any instance of success. The point is that in being understood as a *capacity* perception is not itself taken to be an *instance* of success. "The trouble," Scheffler says, "is that these properties (being a capacity versus being an instance) exclude each other, so the joint attribution is self-contradictory."[38] In the end, to remove the trouble, Scheffler recommends that we read Ryle as not taking concepts such as knowing and perceiving as "episodic achievements" (as singular instances), but rather as "a capacity for achievement."[39] But, in doing this, Scheffler argues, we must accept that "the acquisition of a capacity is itself governed by criteria."[40] If so, Scheffler's reading of Ryle would spell trouble for Lennon's view.

Recall that Lennon takes *perceiving* to be an achievement. Consider what I think is a rather benign Cartesian phrase: "A perceives X." Also recall that Lennon seems to take the phrase, "A clearly and distinctly perceives X" to be Cartesian longhand for expressing A's succeeding at perceiving, where presumably success culminates in A's perceiving the truth. Now, X is supposed to be some object of thought, where it is in A's perceiving X in all the right ways that A is said to perceive the truth. My point is that X is not some object that we are calling "the truth," something that I shall address more carefully in Section III.[41] In my view, X is a nature (whether simple or true and immutable). But even the following looks to be a viable candidate: Suppose that A philosophizes in the proper order and arrives, for example, at "*I am, I exist*, is necessarily true whenever it is put forward by me or conceived in my mind."[42] What is contained in the quotation marks could be an "object" of thought. Call this complex "object" (which is a proposition) P. Here, P is the object of thought. This aligns with Descartes's saying of such a perception that it is "simply a clear and distinct perception of what I am (i.e., what A is) asserting."[43] Now, if Lennon is right, and that all instances of perception are achievements, and that "to clearly and distinctly perceive X" is simply Cartesian longhand for expressing the

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37   Scheffler, "On Ryle's Theory," pp. 728–29.

38   Ibid., p. 728.

39   Ibid., p. 730.

40   Ibid., p. 729.

41   It is not clear to me that Lennon's view requires the truth to be an *object*. Even so, there are places where he seems to hold that it is an object, an object of perception (or thought), that it is indivisible, and so on. (Lennon, *The Plain Truth*, pp. 71, 220) But in connecting truth and essence, as Lennon does (Ibid., p. 71, fn. 40), the view developed in Section III does not appear to be opposed to Lennon's, but seems to be compatible with it.

42   AT VII:25; CSM II:17.

43   AT VII:5; CSM II:24.

achievement, it will follow that if A's perceiving P is an achievement, we can expect that this achievement will be expressed by Descartes as "A clearly and distinctly perceives P". This, as just noted, is exactly how Descartes expresses the matter. So far so good.

What happens if instead of the *cogito*, which is P above, A focuses on his perception of a piece of wax (as the meditator does in the Second and Third Meditations)? Let A's initial perception of the wax be as Descartes describes it:

> It has just been taken from the honeycomb; it has not yet quite lost the taste of honey; it retains some of its scent of the flowers from which it was gathered; it colour, shape and size are plain to see; it is hard, cold and can be handled without difficulty; if you rap it with your knuckle it makes a sound.[44]

Call the complex object described in this passage Q. So, A perceives Q. Is *this* an achievement? On Lennon's view it is, for "perception" is not a task word but is an achievement word. If so, and "to clearly and distinctly perceive X" is simply Cartesian longhand for expressing such achievements, then we should expect Descartes to express A's achievement by claiming, "A clearly and distinctly perceives Q." But, we know that Descartes does not think that the perception of the wax, especially the *sensory* perception of it (described in the above passage), is clear and distinct. The perception of the wax (as described in the above passage) is obscure and confused. But perception is an *achievement* according to Lennon. This is so even for the perception of the wax! The trouble is that in counting perception as an achievement, Lennon gives Descartes no room in his epistemology for *obscure and confused* perception.

What are our options? The obvious one, I think, is to allow perception to count as a *task* word and then to let "to clearly and distinctly perceive" count as expressing the achievement. No doubt this will violate Ryle's analysis of the concept of perception. We could stick to the idea that all perception is an achievement, in which case A's perceiving the wax is an achievement, but then we will want to reject Lennon's claim that "to clearly and distinctly perceive" expresses such achievements. In order to make room for obscure and confused perception (which, because it is a species of perception, will be counted strangely enough as an achievement), we might make "to clearly and distinctly perceive" express a super-achievement. Of course, this may also violate Ryle's view (since he makes no mention of *super*-achievement words). So, our options are slim.

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44   AT VII:30; CSM II:20.

Concerning the adverbial theory of clarity and distinctness Lennon says surprisingly little. This may be due to his holding in the end that these concepts are superfluous, for they serve as only an alternative way of expressing the fact that one perceives the truth. Lennon's view, recall, is that "A clearly and distinctly perceives X," though in its proper adverbial form, is in the end simply coextensive with, and thus can be replaced by, "A perceives the truth". As I have argued elsewhere,[45] there may be ways of preserving, conceptually speaking, both the adjectival and the adverbial forms of expressing "clarity" and "distinctness." This may help to bridge some of the gap that stands between my view and Lennon's. The example that I have used is that of an eye examination. Suppose that Jones is getting her eyes examined and that the optometrist, in determining the proper thickness of lens for Jones, asks Jones to look through various test lenses while looking at a black dot on a wall directly in front of her. As the optometrist places a lens before Jones' eyes, Jones is asked to report "better" or "worse" with respect to the dot's being in focus. Here, "better" indicates that the contrast between the edge of the black dot and the white of the surrounding wall is sharper than what was presented when looking through a previous set of test lenses; "worse" indicates that the contrast is fuzzier or less sharp. So, what Jones is reporting is the presence of a certain relation holding between the elements of her visual field (here the elements are black and white). "Best" would indicate that the edge of the black dot is presented to Jones in its sharpest contrast to the surrounding white field of the wall. By way of her report about the black dot on the white wall, that is, about the *object* of vision, the optometrist can come to know when the *act* of vision is clearest for Jones. Clarity and distinctness, I will argue below, can be aligned with the eye examination case. If so, Lennon can maintain the adverbial form of expression, here *clare* and *distincte*, while allowing some conceptual room for the adjectival reading, where "clear" and "distinct" are expressed by the Latin *clarus* and *distinctus*—forms of expression that are in fact employed by Descartes. But instead of thinking of these as two distinct *types* of feature, as Lennon seems to do, I will suggest that they can be taken as two different ways of talking about the *same* feature. My point is that the adjectival and the adverbial formulations of clarity and distinctness need not be understood as two distinct competing (and incompatible) views.

My own reading of Descartes on the matter of clear and distinct perception is akin to Lennon's in that it too is a revisionist account. It casts clarity and distinctness as logico-epistemic features to be found in certain ideas. Lennon has in fact identified it as one of "the most cogent of recent attempts to tighten

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45   Smith, *Matter Matters*, p. 75.

Descartes's use of the terms 'clearly' and 'distinctly' ..."[46] But, as cogent as it may be, it is important to see that Lennon takes it to be among the better attempts at establishing exactly the *wrong* view of Descartes (primarily this is so because he takes it to be a version of the label theory or criterion account). The account argued for here is the *enumeration-account*, named after the concept of enumeration Descartes developed in the *Rules*.[47] I believe, contra Lennon, that the enumeration-account is a version of the model theory and not a version of the label or criterion theory, and that if clarity and distinctness are criteria, they are not criteria in the problematic sense given them in the context of the label theory. As I understand them, clarity and distinctness are rule-based concepts, which, I think, aligns with Regis' suggestion in the passage quoted above. Specifically, clarity and distinctness are produced by applying, in our analysis of ideas, certain rules given to us by Descartes in his method of enumerating. As I noted earlier, a clear and distinct idea conforms to the master enumeration. Let me very briefly introduce the enumeration-account and then mount my defense of the concepts of clarity and distinctness against Lennon's claim that they are dispensable terms.

As just indicated, the enumeration-account takes clarity and distinctness to be rule-based concepts, specifically connected to the structure or order of what Descartes calls the "simple natures".[48] The simple natures constitute the contents of our ideas. *Extension* is a simple nature, *shape* is a simple nature, *thinking* and *willing* are simple natures, as are *red, hot, cold, sweet*, and all of the other sensible qualities. The enumeration is the proper hierarchical ordering of the system of simple natures, where the order is specifically epistemic.[49] What this means is that the natures are ordered according to classes, the order reflecting the fact that some natures are known (or made intelligible) on the basis of others.[50] The method of enumerating might be best thought of as the method of "collecting and dividing". The enumeration is a scheme that is a collection and division of the simple natures. The method of ordering is remarkably sophisticated. Here I shall offer only a brief sketch.

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46 Lennon, *The Plain Truth*, p. 170.

47 Descartes in fact refers to this as "the method of enumeration" (AT X:398; CSM I:31).

48 For details of this, see my "A General Theory of Cartesian Clarity and Distinctness Based On the Theory of Enumeration in the *Rules*," *Dialogue*, XL (2001), pp. 279–309; and Smith, *Matter Matters*, specifically Part II. Hereafter, I shall refer to the *Dialogue* article as Smith, "A General Theory."

49 AT X:387–88; CSM I, 25. Though I might add that Descartes's rationalism seems to correlate the epistemic order with the ontological order.

50 AT X:381; CSM I:21.

The enumeration-account is rooted in the idea of comparing objects (the ones being investigated), the aim being to find any similarity between them. This will result in a special sorting or ordering of the objects, which, as I just indicated, Descartes calls the enumeration. Specifically, what we should look for, he says, is whether the objects being compared share a *common nature*. In Rule Fourteen, he writes, "Unity is the common nature which . . . all the things which we are comparing must participate in equally."[51] Prior to this, but still in Rule Fourteen, he says several things that foreshadow this important characterization of the common nature. Here is a short list:

(1)   This common idea is carried over from one subject to the other solely by means of a comparison, which enables us to state that the thing we are seeking is in this or that respect similar to, or identical with, or equal to, some given thing.[52]

(2)   Accordingly, in all reasoning it is only by means of comparison that we attain an exact knowledge of the truth.[53]

(3)   We should note that comparisons are said to be simple and straightforward only when the thing sought and the initial data participate equally in a certain nature.[54]

Simply put, common natures are a species of relation that hold between the simple natures. Here, I will cast such relations as logico-epistemological. Such relations underwrite the intelligibility, and hence any subsequent knowledge, of the world. Given Descartes's rationalistic commitments, the logico-epistemic system (the enumeration) will be importantly related to his metaphysics. So, the master enumeration will also express Descartes's metaphysical dualism. That being said, since we are interested in an account of clarity and distinctness, I will focus on the *epistemic* import of the enumeration. As I noted, these specific relations have certain properties that account for their ability to do two things, which in this context is their ability "to collect" and "to divide" a set of objects. Descartes refers to such relational properties in this context as "common notions".[55] I have argued elsewhere that the common notions he mentions are similar to what today are called *reflexivity, symmetry*, and *transitivity*.[56]

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51   AT X:449–50; CSM I:63.

52   AT X:439; CSM I:57.

53   AT X:439; CSM I:57.

54   AT X:440; CSM I:57.

55   AT X:419; CSM I:45.

56   Smith, *Matter Matters*, pp. 97–8.

Consider the relation "x is the same color as y". Let A be a monochromatic marble. The relation "x is the same color as y" is reflexive since "A is the same color as A" will always be true (i.e., A is the same color as itself). For two monochromatic marbles, A and B, the relation is symmetric since "If A is the same color as B, B is the same color as A" will always be true. And the relation is transitive, since for marbles A, B, and C, "If A is the same color as B, and B is the same color as C, then A is the same color as C" will always be true. In contemporary terms, in having the relational properties of reflexivity, symmetry, and transitivity, the common natures are equivalence relations. Such relations might be contrasted to those that do not possess such relational properties. Consider, for example, the relation "x is the father of y". Where A is a human being, "A is the father of A" is false (A cannot be his own father). This is enough to rule out the relation as an equivalence relation. But let's work the example out to its end. Where A and B are distinct human beings, "If A is the father of B, B is the father of A" will be false. And, where A, B, and C are distinct human beings, "If A is the father of B, and B is the father of C, A is the father of C" will be false (for, A will not be C's father but will be C's grandfather). Lacking the relational properties of reflexivity, symmetry, and transitivity the relation "x is the father of y" is not an equivalence relation.

Why are equivalence relations important here? The answer is that when applied to a set of objects, the application of an equivalence relation will always sort the objects so that the resulting structure is what is called a "partition," which, I have also argued, is akin to Descartes's notion of an enumeration.[57] Let me explain. Suppose that there is a bunch of marbles scattered about on the floor. For simplicity's sake let's again assume that the marbles are monochromatic. To partition the marbles (into jars, say) we will have to meet the following three criteria: where S is the set of marbles on the floor, we make a partition of S if, and only if, (i) every marble on the floor is placed in exactly one jar, (ii) every jar contains at least one marble, and (iii) the union of the jars will simply be the original set of marbles S.

Without going too far afield, Descartes claims that establishing a partition or enumeration of objects is essential to our ever coming to have a complete knowledge of them. This is so because every object will be categorized in the enumeration scheme. Why is this important? Descartes answers:

> . . . the enumeration must be well-ordered, partly because there is no
> more effective remedy for the defects I have just listed than a well-ordered
> scrutiny of all the relevant items, and partly because, if every single thing

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57   See Smith, "A General Theory," and *Matter Matters*.

relevant to the question in hand were to be separately scrutinized, one
lifetime would generally be insufficient for the task . . .

. . . But if we arrange all the relevant items in the best order, so that for
the most part they fall under definite classes, it will be sufficient if we
look closely at one class, or at a member of each particular class, or at
some classes rather than others. If we do that, we shall at any rate never
pointlessly go over the same ground twice, and thanks to our well-devised
order, we shall often manage to review quickly and effortlessly a large
number of items which at first sight seemed formidably large.[58]

So, assuming that the number of objects we wish to study is large (even indefi-
nitely large, as will be the case for bodies in the cosmos), a partition or an
enumeration will make our study possible.

Why is the equivalence relation (the common nature) important in this
context? Assuming, again for simplicity's sake, that in addition to being mono-
chromatic the marbles are primary-colored, we make a partition of the mar-
bles by applying the equivalence relation "x is the same color as y," where if A
and B are marbles, and "A is the same color as B" is true, A and B are placed in
the same jar. Marbles of the same color go in the same jar. Ideally, we will have
three jars (because we are assuming only primary colors): a jar of red marbles,
a jar of blue marbles, and a jar of yellow marbles. This arrangement meets the
above three criteria for being a partition. Here, "collecting" is established by
collecting or sorting the marbles into jars, "dividing" is established by divid-
ing the marbles (in this case) into three, mutually exclusive jars. This is what I
meant a moment ago when casting the method of enumerating as a method of
collecting and dividing. As mathematicians would later prove, the application
of an equivalence relation over a set of objects will partition those objects, and
for any partition of objects there is an equivalence relation that can be found
that, when applied, will reproduce the partition. This is why equivalence rela-
tions are important here.

Descartes employs his method of enumerating to sort out the simple natures.
I have elsewhere called the first or primary enumeration he establishes the
master enumeration, which serves as a kind of scheme or systematic blueprint
of the entire system of simple natures.[59] Descartes begins by considering the
class of finite substances in the cosmos. Call this S. He makes a partition (enu-
meration) P of S by applying the equivalence relation "x has the same principal
attribute as y". P is a class that includes two (equivalence) classes: the class of

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58   AT X:390–91; CSM I:27.
59   Smith, *Matter Matters*, pp. 108–9.

thinking things (call this T) and the class of extended things (call this E). Every member of S is either a member of T or E, but not both. Since every member of S falls into exactly one class in P, that is, they fall into either T or E but not both, and every class in P includes at least one member of S, and the union of the classes in P (i.e., T and E) is the original class S, then P is a partition (enumeration) of S. This, as I just said, is Descartes's master enumeration. Things get more complicated as Descartes shows us how to produce new enumerations of the classes of thinking things and of extended things respectively—these will be enumerations of what he calls "modes". But we need not go into this, for enough is on the table to move forward.

Distinctness for Descartes, at least in light of his method, is to be understood in terms of the master enumeration. Think back to those marbles. The marbles are "distinct" insofar as there are three mutually exclusive classes (the jars), where each marble is in a jar and no marble is in more than one jar, and every jar contains at least one marble, and the union of the jars will reproduce the original bunch of marbles on the floor. So, red marbles are distinct from blue marbles, blue marbles from yellow marbles, and so on. Where the simple natures are analogues to those marbles, the master enumeration is a partition P of the original class of finite substances that inhabit the cosmos, where P includes two equivalence classes: the class of thinking things T and the class of extended things E. On this view, an idea is distinct if, and only if, the simple natures that make up its content are found in either T or E, but not both. Otherwise, if an idea's content is found in both T and E, the idea is confused. Literally, the simple natures are *confusio*, or "mixed together". So, distinctness and confusion are opposites.

Clarity is a more difficult matter.[60] But the upshot is that an idea is clear if, and only if, there is a relation that is perceived to hold between the simple natures that constitute the idea's content. Such relations serve to unite or to unify the idea's content. In light of the marble case, the equivalence relation (analogue to the common nature) served to sort or to collect the marbles into jars. The marbles were shown to belong to specific classes, the classes (represented by jars in this case) Red, Blue, and Yellow. Notice that when engaged in the method of enumerating, then, clarity is a concept connected to the act of collecting and distinctness is a concept connected to the act of dividing. Concerning the former, if a relation (common nature) is perceived to hold between the simple natures constituting an idea's content, the idea is clear. If such a relation is not perceived, the idea is obscure. So, clarity and obscurity are opposites.

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60   For more on this, see Smith, "A General Theory," and *Matter Matters*.

Consider again the adventitious (sensory) idea of the sun. As we know, Descartes says that this idea is obscure and confused. How might this be understood in terms of the enumeration-account? Recall that this idea exhibits the sun as being flat, circular-shaped, yellow, and hot. There is no common nature (equivalence relation), Descartes says, that *can* be perceived which holds between the simple nature denoted by "circular," for example, and the simple nature denoted by "hot".[61] Their being unified (in a single subject), which is what a common nature would establish, is utterly unintelligible.[62] And so, there is no relation that can be perceived that unites the content (the simple natures) of this idea. Hence, this idea is obscure. What is more, since some of the simple natures included in this idea belong to T (e.g., the simple nature denoted by "hot"), and others belong to E (e.g., the simple nature denoted by "circular"), the idea is confused. Consequently, this idea is obscure and confused. Contrast this to the analysis of the idea of the true and immutable nature of a circle. Here, the idea contains only those simple natures included in E (e.g., line, shape, size, area, and so on). Hence the idea is distinct. The salient equivalence relation is "x modifies the same attribute as y" (so, shape modifies the same attribute as size, etc.), where the attribute they modify is extension. And there are in fact several relations that we can perceive holding between these simple natures. For example, the simple natures denoted by "circumference" and "diameter" are related so as to constitute the simple nature denoted by "π", where π and the simple nature denoted by "radius" are related so as to constitute the simple nature denoted by "area," and so on. The point is that we can perceive these special relations holding between the simple natures that constitute this idea, which serve to "unify" them into a single nature (the nature of the circle in this case). Hence this idea is clear. Consequently, this idea is clear and distinct.

Notice that even though we will find properties or features (the simple natures in this case) picked out by such terms as "shape" and "size" in the idea of the circle, we will not find any analogous property or feature picked out by "clear" or "distinct". If clarity and distinctness are features found in this idea, they are not features in exactly the sense that shape and size are features. As I mentioned earlier, I take clarity and distinctness to be structural features (perhaps we can call them "meta-features"); they refer to a certain arrangement or ordering of the simple natures, but are themselves not simple natures. Here, I believe that the enumeration-account agrees with Lennon's contention

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61   AT VIIIA:322; CSM I:285. Descartes focuses here on the simple nature motion and those simple natures (later called the sensible qualities) such as colors.

62   Ibid. See also the 22 July 1641 letter to De Launay, AT III:421; CSMK III:188.

that clarity and distinctness are not psychological properties of ideas. But more importantly, they are not criteria as depicted in the label theory. Even so, they do appear to be features found in certain ideas. To show why this is not a problem, as Lennon may contend, consider the following analogy.

Suppose that an artist wishes to paint a picture. Let the subject of the painting be a blue vase that sits on a table. Let's say that the blue vase is made of transparent glass.[63] Now, the first thing to note is that in order to properly depict this vase, the artist will have to succeed at depicting something called "transparency". The challenge is that this must be accomplished by way of the artist's using *opaque* paint, for there is simply no transparent paint that the artist can purchase. As Wittgenstein once considered the matter, "If we wanted to say the colour of the glass was also transparent in the painting, we would have to call the complex of colour patches which depict the glass its *colour*."[64] So, the complex of colors that the artist uses will have to depict or represent the "color" of the glass, but more importantly for the point that I am making, it will have to depict or represent something we are calling the "transparency" of the glass. Wittgenstein considers a possible rule for the artist to follow:

> Something white behind a coloured transparent medium appears in the colour of the medium, something black appears black.[65]

So, if the artist wishes to depict the blue vase as being transparent, whatever is white behind the vase will have to appear blue, and whatever is black behind the vase will have to appear black. If our artist wished to instead paint a red vase, the rule is the same: whatever is white behind the vase will have to appear red, whatever is black behind the vase will have to appear black, and so on. My point is that even though there will be properties that directly constitute the painting that are picked out, for example, by "blue," "white," "black," etc., there will not be any property similar to these that is picked out by "transparent". Rather, if the latter is picking out a property in the painting, it is picking out a certain *ordering* or *arrangement* of the more basic properties, which in this context are the aforementioned colors. Transparency, at least in light of the painting case, is a relation that can be expressed as a *rule*. I want to suggest that clarity and distinctness are like transparency here. If "clear" and "distinct" are

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63   I borrow this case from Wittgenstein, which he discusses in *Remarks On Colour*, McAlister, Linda and Schättle, Margarete (trans.), Anscombe, G.E.M. (ed.). Los Angeles: University of California Press, 1978, pp. 5e–6e.

64   *Remarks On Colour*, p. 5e, paragraph 18.

65   Ibid., p. 5e, paragraph 20.

picking out any properties in our ideas, they are picking out a certain ordering or arrangement of the simple natures, the latter analogous to the colors in the painting case—so, to be perfectly clear, they would be picking out specific relations holding among the simple natures constituting an idea. As claimed earlier, clarity and distinctness are not criteria as depicted by the label theory, but the point to now emphasize is that they are also not dispensable terms. Within the context of a rule-based or a model theory, they are terms that pick out the salient ordering or arrangement of simple natures.

How might the enumeration-account deal specifically with the *cogito*? To best understand this, we must consider it in the light of Descartes's "big picture". Recall that Descartes establishes the master enumeration by applying the equivalence relation "x has the same principal attribute as y" to the set of finite substances. Here, the *principal* attributes are thinking and extension. There are other attributes. For example, existence, unity, and duration are attributes.[66] Clearly, to apply "x has the same attribute as y," where one of these other attributes is referred to, the application will not result in producing the master enumeration. The trouble will be that all finite substances share these other attributes.[67] Thus, no real distinction would be drawn between the substances under consideration. So, thinking things and extended things will have, for example, duration in common. With the exception of thinking and extension, then, all other attributes will be only conceptually distinct from one another.

Descartes writes:

> Such a distinction is recognized by our inability to form a clear and distinct idea of the substance if we exclude from it the attribute in question, or, alternatively, by our inability to perceive clearly the idea of one of the two attributes if we separate it from the other. For example, since a substance cannot cease to endure without also ceasing to be, the distinction between the substance and its duration is merely a conceptual one.[68]

As indicated just a moment ago, thinking is really distinct from extension, and vice versa. What this means is that we *can* conceive the one while excluding the other (this is why they are *principal* attributes). But, thinking (or a thing that thinks) will only be conceptually distinct from its duration or existence, and this will be the case for extension too, namely, that extension (or an

66   AT X:419; CSM I:45, AT VIIIA:23–4, 26; CSM I:208–9, 211–12.

67   AT X:419; CSM I:45.

68   AT VIIIA:30; CSM I:214.

extended thing) will only be conceptually distinct from its duration or existence. For, as Descartes says in the above passage, a substance must cease to endure once it ceases to be (in this case, once it ceases to be thinking or ceases to be extended). As Descartes puts it in the *Principles*, "Thus, if we perceive the presence of some attribute, we can infer that there must also be present an existing thing or substance to which it may be attributed."[69]

The *cogito* is the intuitive or immediate grasp of this very connection between the attribute thinking and the attributes duration or existence: "I am, I exist" *must* be true so long as I think. One would be contradicting oneself in claiming that one could be actively thinking and yet fail to endure or to exist. In terms of the enumeration, think of this as follows. Descartes says, for example, that shape is unintelligible in exclusion of extension.[70] As I have argued elsewhere,[71] this means that shape *entails* extension, which, in the context of the master enumeration, means that the class *shape* is included in the class *extension*. Likewise, doubting is unintelligible in exclusion of thinking. This means that doubting entails thinking. And, what this in turn means is that the class *doubting* is included in the class *thinking*. Now, since both thinking and extension entail duration or existence, both classes, the class *thinking* and the class *extension*, are included in the class *duration* or *existence*.[72] The point to stress here is that it is impossible to deny a thing's existence while conceiving that this thing thinks, just as it is impossible to deny a thing's thinking while conceiving that this thing doubts. These in turn are no different from the impossibility of denying a thing's extension while conceiving that this thing is shaped.[73] Therefore, as I claimed earlier, the *cogito* conforms just as much to the master enumeration as does any other clear and distinct idea. Its central role for Descartes is just an artifact of the order of discovery followed in the *Meditations*. Even so, it can, as Regis and Lennon claim, serve as a model for us

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69   AT VIIIA:25; CSM I:210.

70   AT VIIIA:25; CSM I:210.

71   See, e.g., Smith (2010), p. 104–6, 113*f.*

72   I realize that in contemporary logical parlance "existence" is not a predicate (and so does not determine a class in the way that predicates do), but is instead a quantifier. But there is the connection, again in contemporary jargon, to talk of classes, for this quantifier tells us whether the extension of a concept (a class) has any members. There may be ways of dealing with existence as an attribute that is only conceptually distinct from thinking or extension that alleviates some of the trouble, but I will not attempt to do that here.

73   As I argue in Smith (2010), the line of reasoning perhaps more related to the cogito is: it will be impossible to deny that body exists while conceiving it to be extended. So, the very conceiving of body is, in an important sense, a guarantee of its existence.

in our coming to understand what it means to say that our ideas are clear and distinct.

3   Object and Truth

I want to discuss one last issue before making my concluding remarks. As noted earlier, Lennon claims that *what* one perceives, that is, the *object* that one perceives, when clearly and distinctly perceiving, is *the truth*. "The truth is right before our eyes, plain and obvious."[74] As Lennon's account unfolds, the view gets more complicated. "All knowledge," he says, "is basically a matter of seeing the same thing under different aspects."[75] The *cogito*, then, is simply one way the truth appears to the meditator (in the Second Meditation, for instance). *Prima facie* this view is problematic. To see the problem, assume the uncontroversial claim that nothing can possess contrary properties. Now, in the Fifth Meditation Descartes claims that when we clearly and distinctly perceive the nature of a triangle, we perceive the truth. But this must also be the case when clearly and distinctly perceiving the nature of a circle: when we clearly and distinctly perceive the nature of the circle, we perceive the truth. If the perception of the triangle's nature is identical with a perception of the truth, and the perception of the circle's nature is identical with a perception of the truth (where there is only *one*, indivisible truth (Lennon 2008, pp. 71, 220)), then both perceptions are really of one and the same object—the truth. This is another way of saying that we are seeing the same thing [i.e., the truth] under different aspects. But nothing can be both a triangle and a circle (at the same time, in the same respect). Thus, these natures cannot be different aspects of one and the same object. And so, *the truth* cannot be the object perceived when clearly and distinctly perceiving the triangle and the circle. So, what *can* it mean to claim that one perceives the truth? What might *Descartes* mean?

When Descartes analyzes what it is that he has discovered in landing upon the *cogito*, from which he constructs the "truth rule"—that whatever I very clearly and distinctly perceive is true—what he says is: "In the first item of knowledge there is simply a clear and distinct perception of what I am asserting [*viz*., "I exist" must be true whenever I think it]."[76] Two paragraphs later he considers cases in which he "was considering something very simple and

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74   Lennon, *The Plain Truth*, p. vii. Also see pp. 171–74.
75   Lennon, *The Plain Truth*, p. 176.
76   AT VII:35; CSM II:24.

straightforward [as] in arithmetic and geometry."[77] So, initially, simplicity looks to be important here. But at best, what Descartes says only *suggests* that in some cases when one perceives the truth, one perceives something simple. Simplicity is not offered as *the* defining feature of truth—it is neither offered as *the* defining feature of certainty, nor of clear and distinct perception. So, ultimately the concept of simplicity may not be of any help.

But all is not lost. Descartes says, again in the Fifth Meditation, ". . . for it is obvious that whatever is true is something."[78] Here, I might add that he seems to be saying that whatever is true is something *real*, where, as Lennon has argued elsewhere,[79] being *real* in this context means that it exists independently of its being perceived by a finite mind. When conceiving the nature of a triangle, for example, Descartes claims, "All these properties are certainly true, since I am clearly aware of them, and therefore they are something (real)," where he immediately reminds his reader that he had, ". . . already amply demonstrated that everything of which I am clearly aware is true."[80] So, at this point we appear to be able to establish that whatever is clearly perceived is true. But what exactly does it mean to say that the object we clearly perceive is *true*? This is the rub. We know from what was established just a moment ago that if what we perceive is true, we in essence perceive something that is *real*. Now, if what we clearly perceive is true, and what we perceive to be true is real, it follows that what we clearly perceive is real—that is, it is taken to exist independently of any finite mind. How might we apply this to the example of the triangle? Here is one way: suppose that I claim to clearly perceive the nature of the triangle. This apparently warrants my going on to claim that what I perceive is true (or, in Lennon's terms, that I perceive the truth). From here, I gather, I am warranted to claim that what I perceive, the nature of the triangle, is real. Along Augustinian lines, truth and being look to be coextensive. But now in the terms just introduced, we might modify this slightly and say that being *true* and being *real* are coextensive.

To get things exactly right, I will adopt what Russell Wahl says about the matter. He has argued that Descartes's position on perceiving the truth should be understood "in terms of perceiving (having ideas of) natures which are

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77   AT VII:35; CSM II:25.

78   AT VII:65; CSM II:45.

79   Thomas Lennon, "The Eleatic Descartes," *Journal of the History of Philosophy*, Vol. 45, No. 1, (2007), pp. 29–45, p. 30.

80   AT VII:65; CSM II:45.

genuine or real."[81] So, the "something" here—in other words, that of which one is clearly aware—will be *a nature*.[82] On this view, *the truth* is not strictly speaking an object that is perceived. Related to Descartes's remarks about perceiving the nature of the triangle and perceiving the truth, Wahl says:

> But while many contemporary commentators find it hard to call objects true or false, it does not appear to have been so hard for Descartes. In his Replies to the Fourth Set of Objections (by Arnauld), for example, Descartes referred to the truth or falsity of objects, and in the first Meditation, Descartes appears to equate "true" with "real" or "having being" (AT VII: 20; this is masked by Cottingham's translation CSM II: 13). In a late letter to Clerselier, 23 April 1649, Descartes equates the truth of the object of an idea with its being real, or including being: "Truth consists in being and falsehood only in non-being" (AT V:356; CSMK III:377). Descartes often makes reference to "true and immutable natures" (e.g., in Meditation V, AT VII:64; CSM II:44), which certainly suggests that Descartes is not restricting his use of the word "true" as modern commentators would. Here it should be stressed that in this sense of "true" what is true is the object before the mind and not the idea—not the operation of the mind, but what is perceived. This sense of "true" is certainly tied to the doctrine that what we perceive very clearly and distinctly is true.[83]

He goes on to point out that commentators have typically read "true" as being something that Descartes attributes to propositions, while others read "true" as something attributed to the ideas themselves. Wahl instead reads Descartes as holding that *what* is true is the *object* being perceived—a nature—where, in this context, to say that it is *true* is to say that it is *real* (or is independent of a finite mind).

Wahl's view, I think, can be understood in the light of the enumeration-account. Recall the geometrical idea of the circle. The enumeration-account was able to explain why this idea is clear and distinct. It is clear because there are relations (common natures) that can be perceived to hold between the

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81   Wahl, Russell. "How Can What I Perceive Be True?" *History of Philosophy Quarterly*, Vol. 12 No. 2, April 1995, pp. 185–194, p. 188.

82   This looks to be along the lines of what Lennon says. (See, for example, Lennon, *The Plain Truth*, p. 71, fn. 40) So, the view that I develop here, as I noted in the previous Section of the paper, looks to be compatible with Lennon's view, with the one exception that clarity and distinctness turn out to be indispensable terms.

83   Wahl, "How Can What I Perceive Be True?" p. 188.

simple natures making up the idea, and it is distinct because all of the simple natures fall into class E (the class of extended things) of the master enumeration. My point is that when an idea, like the geometrical idea of the circle, is clear and distinct, it is so because it aligns with the master enumeration (we might think of this, when worked out in more detail, as a scheme of well-ordered classes of simple natures, all classes being ultimately included in either T or E, but not both). An idea such as the sensory idea of the sun is obscure and confused. This is so because there are no relations (common natures) that can be perceived to hold between several of the simple natures that make up the idea (between yellow and circular, e.g.), and the simple natures making up the idea fall into both T and E.

4   Removing Obstacles: Concluding Remarks

By employing the method of enumerating to analyze the sensory idea of the sun we can identify those simple natures that belong to T (e.g., yellow and heat) and those that belong to E (e.g., shape and size). Once we have done this, we could go on to ignore those properties that belong to T and focus on those that belong to E. This, if I understand Descartes correctly, would be to produce an abstract idea.[84] Arguably, the abstract idea that we could construct here would no doubt be something like the fictitious idea of the sun that Descartes mentions in the Third Meditation.[85] This idea would represent the sun as being a sphere (as opposed to a flat circle), as being much larger in size than the earth (as opposed to being smaller than my thumb), and so on. The sun as represented by this idea would be principally a *body*, the simple natures that constitute the idea belonging solely to E. Such an idea would be clear and distinct.

Of course, whether this is genuinely an idea of *the sun*, as opposed to the idea of a sphere of a certain size, and so on, has been questioned by scholars.[86] For the purpose of this paper, we need not worry about this. The point of my

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84   The central text here is the 19 January 1642 letter to Gibieuf (AT III:475; CSMK III:202).

85   AT VII:39; CSM I:27.

86   See, e.g., Nolan, Lawrence. "The Role of the Imagination in Rationalist Philosophies of Mathematics," in *A Companion to Rationalism*, Nelson, Alan (ed.). Oxford: Blackwell, 2005, pp. 224–49, p. 235. Here, Nolan argues that Descartes had rejected the idea of natural kinds. On Descartes's view, the nature of the sun is no different from the nature of a tiger, since both are bodies, and the essence of body is to be extended in length, breadth, and depth. So, we might question whether the astronomical (here, the abstract geometrical) idea of the sun we constructed is an idea of anything other than simply a specific *body*.

employing the method of enumerating here was simply to show how it works to "remove" the obstacles to perceiving the truth—in this case, the obstacles were those simple natures belonging to T (which we removed by way of our ignoring them). By making the idea distinct we guaranteed that the remaining simple natures belonged to E. Specifically, what remained was the idea of the true and immutable nature of a sphere. This idea, as we know, is clear and distinct. The content of the idea conforms in all the right ways to the master enumeration. And, as Wahl argued, this nature's (the nature of the sphere) being real is a necessary (and perhaps even a sufficient) condition for our claiming that we perceive the truth.

All of this, I contend, is actually *aligned* with Lennon's view, when, as noted at the beginning of this paper, he writes:

> The truth is right before our eyes, plain and obvious. All we have to do is look and see it, and seeing it there provides all the certainty we need or could reasonably want. If we do not see the truth, the failing is due to our having placed obstacles in the way, which we must remove. Descartes's whole philosophy might be understood as an attempt at identifying the obstacles and showing how they can be removed.[87]

Admittedly, the enumeration-account is complicated. The important thing is that its result is simple: when we clearly and distinctly perceive we perceive the well-ordered system of simple natures; and as Lennon puts it, all of it is there, plain and obvious.

I mention this now that we have arrived at the end specifically because Lennon claims that one of the troubles with the enumeration-account, its biggest fault, is that it is too complicated (this is in contrast to my concern about Lennon's account, which I have suggested is too simple). He writes:

> Like the late Ptolemaic system, however, the account impresses without convincing. Like Alfonso X on the Ptolemaic system, one is inclined to say that if God had consulted me beforehand, I would have recommended something much simpler.[88]

But the enumeration-account is as complex as it needs to be—no more, no less. It is Descartes's account as worked out in the *Rules*. The point to emphasize about the value of the enumeration-account, especially in light of Lennon's

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87   Lennon, *The Plain Truth*, vii.
88   Lennon, *The Plain Truth*, p. 170.

view, is that the method of enumerating shows *how* to remove the obstacles, which in turn shows *how* to make our ideas clear and distinct. Even Lennon agrees that these are virtues of the enumeration-account.

Wittgenstein once found himself faced with complaints about certain complexities inherent in his philosophical approach. Here is a short fragment (not published during his lifetime) in which he entertained such a complaint from a hypothetical interlocutor:

> How does it come about that philosophy is so complicated a structure? It surely ought to be completely simple, if it is the ultimate thing, independent of all experience, that you make it out to be.[89]

Wittgenstein's answer, I will suggest, may serve as a response to Lennon's complaint:

> Philosophy unties knots in our thinking; hence its result must be simple, but the philosophising has to be as complicated as the knots it unties.[90]

To be sure, the enumeration-account is complex, but its result is simple. Philosophically working out the details of how to make our ideas clear and distinct is a complicated knot to untie. No one can deny this. Descartes's account of clear and distinct ideas, I argue, is as complex as it needed to be.

If the enumeration-account is right, clarity and distinctness are not criteria in the sense given them in the label theory. And, given that the enumeration-account looks to be more closely related to the model theory, I believe that it is at least compatible with Lennon's view. But the salient lesson to learn here, I think, is that even though clarity and distinctness are not criteria as portrayed in the label theory, it does not follow that they are dispensable terms. According to the enumeration-account they are crucial concepts that do serious work in Descartes's epistemology.

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89   L. Wittgenstein, *Zettle*, Anscombe, G.E.M. (trans.), Anscombe, G.E.M. and von Wright, G.H. (eds.). Los Angeles: University of California Press, 1970, sec. 452, p. 81e.

90   Ibid.

Descartes' Logic and the Paradox of Deduction

Brian Rogers and Alan Nelson

1   Introduction

Descartes is among the many philosophers who have noticed an apparent conflict between the validity of logical arguments and their usefulness. Cohen and Nagel identify this conflict as *the Paradox of Deduction*:

> If in an inference the conclusion is not contained in the premise, it cannot be valid; and if the conclusion is not different from the premise, it is useless; but the conclusion cannot be contained in the premises and also possess novelty; hence inferences cannot be both valid and useful.[1]

It seems that if we require the conclusion to be contained in the premises of a valid argument, then we already have to know the conclusion, given that we know the premises. Yet if we already know the conclusion of an argument beforehand, any deductive steps which help us arrive at that conclusion must be superfluous, for they can only produce something that we already know to be true. So if valid arguments can only lead us to conclusions already known, then it would appear that deductions can be of no use in helping expand our knowledge.

The version of the Paradox described by Cohen and Nagel is introduced in the context of modern formal logic, but the Paradox of Deduction is also a problem for the syllogistic employed by the Scholastics. Descartes' argument in the *Rules for the Direction of the Mind* against the usefulness of traditional syllogisms is echoed by Cohen and Nagel's Paradox:

> . . . on the basis of their method, dialecticians are unable to formulate a syllogism with a true conclusion unless they are already in possession of the substance of the conclusion, i.e., unless they have previous knowledge

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1   Cohen and Nagel use the general term 'inference,' but the Paradox obviously concerns deductive inference only. See Cohen, M.R., and Nagel, E. *An Introduction to Logic and Scientific Method*. New York: Harcourt, Brace & Co. 1934, p. 173.

of the very truth deduced in the syllogism. It is obvious therefore that they themselves can learn nothing new from such forms of reasoning, and hence that ordinary dialectic is of no use whatever to those who wish to investigate the truth of things.[2]

Descartes here argues that Scholastic logic is subject to the Paradox of Deduction; the requirements of formal validity are so restrictive that syllogisms cannot serve any purpose in amplifying or extending knowledge. The only minor purpose of a syllogism Descartes can find is that "it sometimes enables us to explain to others arguments which are already known",[3] but beyond serving as a tool of presentation, a syllogism provides no resources for discovering new truths.

In light of the perceived failings of Scholastic logic, Descartes produces a new theory of inference that is radically different from both Scholastic[4] and more modern formal accounts:

> ...the logic of the Schools...is strictly speaking nothing but a dialectic which teaches ways of expounding to others what one already knows. Such logic corrupts good sense rather than increasing it. I...[want]

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2   Descartes, René. *Rules for the Direction of the Mind*. AT X 406, CSM I 36–37. All references to Descartes' works are to *Oeuvres De Descartes*, 11 vols., C. Adam and P. Tannery, eds., Paris: Librairie Philosophique J. Vrin, 1983, as AT, volume number, page number; and by the standard English edition, *The Philosophical Writings Of Descartes*, 3 vols., translated by J. Cottingham, R. Stoothoff, and D. Murdoch (Volume 3 including A. Kenny), Cambridge: Cambridge University Press, 1988. As CSM, volume number, page number.

3   *Rules*, AT X 406, CSM I 37. While Descartes believes that the syllogistic presentation of inferences can sometimes remind one of a previous train of thought, he argues that following formal inference rules leads us to believe ideas on authority, rather than to consider their truth for ourselves: "...we [will] make no mention of any of the precepts with which dialecticians suppose they govern human reason. They prescribe certain forms of reasoning in which the conclusions follow with such irresistible necessity that if our reason relies on them, even though it takes, as it were, a rest from considering a particular inference clearly and attentively, it can nevertheless draw a conclusion that is certain simply in virtue of the form. But, as we have noticed, truth often slips through these fetters" (*Rules*, AT X 405–406, CSM I 36).

4   For a survey of Scholastic texts dealing with formal logic see, Kneale, W.C., and Kneale, Martha, *The Development of Logic*. Oxford: Oxford University Press, 1962, pp. 274–97. For discussion of the philosophical context surrounding Descartes' theory of inference, see Garber, Daniel. *Descartes' Metaphysical Physics*. Chicago: Chicago University Press, 1992, pp. 58–62; Gaukroger, Stephen. *Cartesian Logic*. Oxford: Oxford University Press, 1989, pp. 6–47; and Easton, Patricia, ed. *Logic and the Workings of the Mind*. Atascadero: Ridgeview Publishing, 1997.

instead the kind of logic which teaches us to direct our reason with a view to discovering the truths of which we are ignorant.[5]

Descartes' new conception of logic does not pit validity against novelty. Thus his theory of deduction can be seen as one example of how the Paradox of Deduction might be resolved. The relevance of Descartes' theory of deduction to the Paradox of Deduction provides the motivation for this essay, which attempts to elucidate that theory.

A deduction for Descartes is a connected series of ideas. The next section introduces Descartes' account of the central mental functions of *intuition* and *deduction*. It also poses some questions that a successful interpretation should answer regarding the certainty of deduced conclusions and the nature of the links between steps in the deduction. Section 3 surveys several interpretations of Cartesian deduction from the literature, noting in particular their answers to the previously posed questions. While each of them provide a piece of the puzzle, these interpretations are incomplete, for they fail to show how Descartes' theory of deduction is supported by his most fundamental explanatory resource—the theory of ideas. The basics of this theory are outlined in Section 4, which focuses on *simple natures*, or simple ideas, and the ways we can cognize them. In his *Rules*, Descartes usually uses the terminology of "intuiting natures" instead of "perceiving ideas." In his later writings, difficult interpretive questions arise about the ontology of natures versus ideas. Descartes' theory of deduction is, however, plainly a theory of mental activity and relationships so the *natures* of the theory of deduction are the vehicles of knowledge, namely ideas. For the purposes of this essay, therefore, we will write of ideas and natures interchangeably.[6] This account of simple natures will provide the key for satisfactorily answering our questions concerning how the steps of a deduction are linked (Section 5) and the extent to which deductive conclusions can acquire certainty (Section 6). This more complete account of Cartesian deduction, supplemented by the theory of ideas, informs the concluding discussion

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5 *Principles of Philosophy*, AT IXB 13–14, CSM I 186.

6 It is well known that the ontological status of simple natures is not made directly clear in the text of the *Rules*. But as J.-L. Marion has argued, even if the simple natures are (or represent) extra-mental essences the *Rules* considers them only insofar as they can be known by the human mind. In other words, the focus must be on ideas however ideas themselves are ultimately construed. See his "Cartesian Metaphysics and the Role of the Simple Natures." in *The Cambridge Companion to Descartes*, John Cottingham (ed.). Cambridge: Cambridge University Press, 1992, pp. 115–139.

of Descartes' resolution of the Paradox of Deduction in Section 7.[7] It should be apparent in this essay that Descartes' perspective differs drastically from our current ways of understanding the nature of deduction, for Descartes' account is non-formal. It is concerned with ideas and their contents, rather than the formal properties of propositions.[8] Ian Hacking expressed this pithily writing, "Leibniz knew what a proof is. Descartes did not."[9] Most philosophers today probably would agree with Hacking and disqualify Descartes' solution to the Paradox because of this feature. Thus, while the motivation for this explication of Descartes' account of deduction is mainly historical, a secondary objective of presenting this theory as a solution to the Paradox is to suggest some of what might have to be involved in a more general solution.

2 The Components of Inference: Intuition and Deduction

In the *Rules*, Descartes discusses two mental functions through which we can attain knowledge: intuition and deduction. Intuition is the more basic of the two:

> By 'intuition' I . . . mean . . . the conception of a clear and attentive mind, which is so easy and distinct that there can be no room for doubt about what we are understanding. Alternatively, and this comes out to the same thing, intuition is the indubitable conception of a clear and attentive mind which proceeds solely from the light of reason.[10]

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[7]   The controversy over the degree to which Descartes' thinking evolves on these issues over his career and in the *Rules* itself has generated a large literature. A manageable review can be found in Schuster, John. "Descartes' *Mathesis Universalis* 1619–28." in *Descartes: Philosophy, Mathematics and Physics*, Stephen Gaukroger (ed.). Brighton: Harvester Press, 1980, pp. 41–96. In this essay we stress the continuities along with (e.g.) Marion, Jean-Luc. *Sur L'Ontologies Grise de Descartes* (2nd Ed). Paris: Vrin, 1981, and against (e.g.) Garber, *Descartes' Metaphysical Physics*, chs. 1, 2).

[8]   A case can be made that no aspects of Cartesian thought are propositional in the sense that became familiar after Kant. See Beck, Leslie J. *The Method of Descartes*. London: Oxford University Press, 1952, pp. 75–6; Lennon, Thomas M. *The Battle of the Gods and Giants*. Princeton: Princeton University Press, 1995, pp. 334–40; Nelson, Alan. "Descartes' Ontology of Thought," *Topoi*, 16 (1997), pp. 163–78, and Smith, Kurt. *Matter Matters*. Oxford: Oxford University Press, 2010, ch. 4.

[9]   Hacking, Ian. "Proof and Eternal Truths: Descartes and Leibniz," in *Descartes: Philosophy, Mathematics and Physics*, Stephen Gaukroger (ed.), pp. 169–180, p. 169.

[10]   *Rules*, AT X 368, CSM I 14.

Intuition for Descartes is then something like the immediate apprehension of self-evident truth. The above description of intuition is virtually the same as Descartes' later account of "clear and distinct perception" in the *Principles of Philosophy*:

> I call a perception 'clear' when it is present and accessible to the attentive mind . . . I call a perception 'distinct' if, as well as being clear, it is so sharply separated from all other perceptions that it contains within itself only what is clear.[11]

Regarding cognition, we see no reason to think that Descartes here changed much more than the terminology in the intervening years. The most famous example of a clear and distinct perception is of course the *cogito*, as described in the *Meditations*. This particular clear and distinct perception is foreshadowed as an "intuition" in the *Rules* with Descartes' observation that "everyone can mentally intuit that he exists, [and] that he is thinking".[12] For present purposes, we need take from this only that an intuition is a perception of an idea with the highest degree[13] of certainty and self-evidence.

The other method for arriving at knowledge is deduction. The process of deduction involves smoothly transitioning from an intuited idea to another idea, so that the latter is seen to be connected with the initial intuition. In this way the exalted cognitive status of the intuition is—at least partly—passed along to the conclusion. A metaphor of links in a chain is used to portray the connection between the initial intuition and the conclusion:

> . . . [deduction] is similar to the way in which we know that the last link in a long chain is connected to the first: even if we cannot take in at one glance all the intermediate links on which the connection depends, we can have knowledge of the connection provided we survey the links one after the other, and keep in mind that each link from first to last is attached to its neighbor.[14]

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11   *Principles* I 45, AT VIIIA 22, CSM I 207–8.

12   *Rules*, AT X 368, CSM I 14.

13   The forthcoming interpretation will utilize a scale of perceptions, ranging from those certain in the highest degree to those that are more doubtful. Several other associated scales will also be introduced. Intuitions for Descartes are at the top of this scale, having maximum certainty. But, as we shall see, intuitions themselves can be scaled with respect to the simplicity of their objects even though they are all maximally certain. It might be thought that Descartes later came to think that maximum certainty accrues only to maximally simple ideas (see for example Nelson, "Descartes' Ontology of Thought").

14   *Rules*, AT X 369–70, CSM I 15.

To place Descartes' account of intuition and deduction within our discussion of the Paradox of Deduction, let us continue to think of the initial, intuited link of this chain as the premise of an argument, and the final link as its conclusion.

Descartes holds that intuition and deduction are the only two methods through which we can acquire knowledge. In consequence, he claims that new knowledge, i.e., novel conclusions, can be acquired through deduction:

> . . . it will be to the reader's advantage to reject [syllogistic forms] alto-gether and to think of all knowledge whatever—save knowledge obtained through simple and pure intuition of a single, solitary thing—as resulting from a comparison between two or more things [i.e., through deductive links between ideas]"[15]

Descartes' account of deduction prompts three important (and interrelated) interpretive questions:

1) What is the cognitive status of the last link in the chain, i.e., how much certainty does the conclusion of a deduction have? Is the conclusion completely certain given the complete certainty of the initial link? Or does the deduction transfer the certainty of the first link to the last one only partially?
2) From what source does the conclusion acquire its degree of certainty?
3) What exactly is the connection between the links in a successful deduc-tive chain? In what sense is the last link a consequence of the preceding links?

These questions must be answered in order to resolve the Paradox of Deduction. Responses to questions 1) and 2) should explain how Cartesian deduction can be used to "investigate the truth of things," and the response to question 3) should clarify the sense in which the conclusion of a deduction is "con-tained" in the premises. Various accounts of Cartesian deduction can be found in the literature. Let us now survey and evaluate some of them with reference to the above questions.

3   Some Accounts of Cartesian Deduction

Stephen Gaukroger suggests, in response to our third question, that adjacent links in an inferential chain are connected by an intuition "consisting in a

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15   *Rules*, AT X 440, CSM I 57.

grasp of a necessary connection between two limiting terms".[16] The connection between two ideas on this account is then primitive and unanalyzable.[17] Since this connection is a necessary one, *necessary truth* is what is transferred between links of a deduction, and deduction is a necessity-preserving procedure.

Calvin Normore argues against Gaukroger's interpretation of deduction as the transference of necessity citing Descartes "... claims to deduce the (contingent) laws of motion from the (necessary) immutability of God".[18] Normore instead claims that Cartesian deduction is a certainty-preserving process: "if one begins a deduction with 'true and known principles' and one proceeds by 'a continuous and uninterrupted movement of thought in which each individual proposition is clearly intuited', one reaches conclusions that are 'known with certainty'".[19] So in response to our first question, if the deductive chain begins with "principles of which we are certain",[20] then the conclusion will be known with *equal* certainty. This view implies that the self-evident certainty of an intuition must be completely transferred to the conclusion of a deduction. And that implies that the conclusion of a deduction must have the same degree of clarity and distinctness as the premises.

David Owen has a more nuanced explanation of the relation between the certainty of the conclusion and that of the premise in a Cartesian deduction. While Normore claims that certainty is wholly preserved, Owen notes that the conclusion is usually less certain than the premises. Descartes' claims, in a crucial passage, that "because it is simpler, [intuition] is more certain than deduction".[21] Since a deductive conclusion acquires its certainty from an intuitive premise, and since according to Descartes deduction is *less* certain than intuition, the conclusion should then be less certain than the premise. Owen focuses on this difference in levels of certainty, and investigates what steps can be taken to elevate the certainty of the conclusion. When Descartes says that intuition is simpler than deduction—and this is crucial—Owen interprets this in terms of the simplicity that some physical and mental acts enjoy over others that are more difficult to perform. Thus the mental act of intuition requires less exertion than the act of deduction: "intuition is a phenomologically

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16   Gaukroger, *Cartesian Logic*, p. 50.

17   Ibid., pp. 50–4.

18   Normore, Calvin. "The Necessity in Deduction: Cartesian Inference and its Medieval Background," *Synthese* 96 (1993), pp. 437–454, p. 445.

19   Ibid., p. 445.

20   Ibid.

21   *Rules*, AT X 368, CSM I 14.

simpler operation of the mind. It requires no process of reasoning...but deduction...is more complex."[22] Owen understands intuitions as "simple" because they require almost no cognitive effort. Simple truths are self-evident in the sense that all we need to do is "look" at them and their truth will be immediately displayed: "in intuition we grasp the truth of what is known all at once; we simply 'see' the truth in one simple operation."[23]

Intuitions thus have more certainty for Owen than deductions because they are cognized more easily. Deductions involve a *movement* of thought, so they require some cognitive exertion. While a deduction begins with a self-evident intuition, our thought must then move to other ideas in a train. Owen describes this as "a process of thought where the attention of the mind must shift its gaze from one item to another."[24] Deduction is thus a process that is by nature *complicated*—it involves moving from one mental task to the next. Owen argues that "this mental complexity is what lowers the degree of certainty" of the conclusion of a deduction with respect to the certainty of its premise, because "we cannot be aware...of one intuitive truth while our attention is directed at another".[25] He claims this is why Descartes notes that "deduction in a sense gets its certainty from memory",[26] for we need memory to be certain that the intuition with which we started a deduction is still simple and self-evident now that our attention has moved on to other ideas.

Since intuitions are maximally certain, Owen argues that deductions can be made more certain by making them more like intuitions. This contributes the important point that deductions can be simple or complex in varying degrees. Because the high certainty of intuition is connected with simplicity, Owen argues that we can make deductions more like intuitions by making them more simple, i.e., reducing their complexity: "if we can grasp an entire deduction in a single thought so that the mind can survey it almost instantaneously, the certainty of such a deduction will be comparable to that of intuition".[27] Since for Owen simplicity correlates with a relative degree of mental exertion, this means that we can make deductions more certain by reducing the amount of mental effort required to perform them. Thus one must rehearse deductions so that they can be performed effortlessly, much as one might regularly practice the piano in order to develop the muscle memory needed for successfully

22   Owen, David. *Hume's Reason*. Oxford: Oxford University Press, 1999, p. 20.

23   Ibid., p. 20.

24   Ibid., p. 21.

25   Ibid., p. 20.

26   *Rules*, AT X 370, CSM I 15.

27   Owen, *Hume's Reason*, p. 22.

performing a difficult composition with little exertion or conscious delibera-
tion ("without thinking", we might say). By practicing a deduction one "is trying
to mimic, in a complex deduction, what is easily available in . . . [an] intuition.
One wants to approximate the phenomenon of holding in one's mind all at
once every aspect of the deduction." When this mimicry is successfully per-
formed "the truth of the proposition deduced begins to approach the certainty
found in intuitions."[28]

David Wong, much like Owen in his account of the level of certainty for
deductions, claims that certainty is a product of surveyability. So to the extent
that we can grasp an entire deduction in one glance, it acquires the certainty
of intuition:

> . . . there are deductions too long to be grasped within a single act of intu-
> ition. After having completed the steps, we can doubt whether they were
> all performed correctly . . . The source [of this doubt] is simply the fact
> that the mind is limited in its ability to hold before itself longer and lon-
> ger proofs in a single act of intuition, which is the only mental operation
> that entirely persuades.[29]

Unlike previously mentioned commentators, Wong makes some attempt to
address our third question about the connection between the links of a deduc-
tion. He asserts that this connection consists in knowledge "that two simple
natures are connected".[30] Like Gaukroger, Wong claims that the steps of a
Cartesian deduction are propositions, although he adds that these proposi-
tions each express something about a simple nature. Thus Wong holds that
the inferential links between steps in a deduction are "necessary connections
between natures".[31]

Let us now review and evaluate the above accounts in light of our ini-
tial interpretive questions, and determine where more work needs to be
done. While Gaukroger argues that Cartesian deductions preserve necessity,
Normore claims that they instead preserve certainty. Owen, however, claims
that the conclusion of a deduction is usually less certain than the premise.
Owen's explanation is that certainty is connected with simplicity or lack of
mental effort. Intuitions are then certain because they are easy to perform and

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28   Ibid. Both quotes are from p. 23.
29   Wong, David. "Cartesian Deduction," *Philosophy Research Archives* 8 (1982), pp. 1–19,
      pp. 13–4.
30   Ibid., p. 11.
31   Ibid., p. 12.

deductions are less certain to the extent that they are more complicated and difficult. To elevate the certainty of deductive conclusions, Owen indicates texts saying that one must practice the deduction so that its performance becomes easier. To the degree that this performative ease approaches the ease of intuitions, conclusions approach that degree of certainty. Wong advances a line similar to Owen's on the cognitive status of inferred conclusions. He also claims that the objects compared in a deduction are propositions, which express something about a simple nature. Like Gaukroger, Wong holds that necessary connections link together the steps of a deduction, but again like Gaukroger he offers no explanation of the kind of necessity or the kind of connection involved.

While Normore suggests that Cartesian deductions preserve certainty, a deduction can in fact completely preserve certainty only under the best conditions. Descartes speaks of the conclusions of deductions as being "remote" from the premises and implies that conclusions are often somewhat less certain than premises. Indeed, he flatly states that "because [intuition] is simpler, it is more certain than deduction".[32] Connecting a conclusion to certain premises can elevate the level of certainty for the conclusion, but certainty is not *completely* preserved, since complete certainty can only come from a clear and distinct perception.

Most accounts agree with Normore in treating a deduction as starting with premises and then moving to conclusions. Yet Descartes often describes deduction as a two-stage process, in which a train of thought begins with the "conclusion" and traces back a path to intuited premises or "principles." Once this path has been followed, one can easily demonstrate the conclusion by following the path in the reverse direction, because the hard work has been done in the first stage:

> . . . we first reduce complicated and obscure propositions step by step to simpler ones, and then, starting with the intuition of the simplest ones of all, try to ascend through the same steps to a knowledge of all the rest.[33]

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32   *Rules*, AT X 368, CSM I 14.

33   *Rules*, AT X 379; CSM I 20. Today we usually describe the premises as being at the 'top' of a deduction, and the conclusion as being 'further down' the inference. In the above passage, Descartes reverses this picture, putting the conclusion at the top, and the intuitive premise at the bottom. This characterization suggests an interesting image of reasoners tracing unknown, unsupported conclusions—hanging in the clouds—to an intuitive ground. Once that has been accomplished, the steps are reversed to go back 'up' the deduction to build a secure and intuitive foundation for the conclusion. However, to avoid confusion

The first stage of this process Descartes later calls "analysis," and the second stage he terms "synthesis." Normore's account of Cartesian deduction only employs the second of these two operations, which in Descartes' opinion is the less important of the two: "...analysis...is the best and truest method of instruction", and while synthesis "may be very suitable to deploy...as a follow-up to analysis," it "is not as satisfying as the method of analysis, nor does it engage the minds of those who are eager to learn, since it does not show how the thing in question was discovered".[34] Since the focus in this essay is on how deductions can be utilized to discover new truths, in what follows we mainly concentrate on the process of analysis, but we should remember that synthesis—the method most closely associated with what we now call "proof"—is merely the employment of the "directly opposite method" from analysis.[35]

Although Normore answers our first question by claiming that certainty is to be preserved in Cartesian deduction, he leaves us without an answer to our second question. We are given no account of *how* certainty is actually preserved, i.e., an explanation of the cognitive processes through which certainty is conferred upon previously uncertain conclusions. In what follows we give an account of what characteristics of Cartesian deduction make it such that *some* of the certainty of the premises is transferred to the conclusion, and that this is true even though not *all* of the certainty is always transferred. This is because deductions only preserve certainty under special circumstances.

Owen stresses that Descartes' logic, unlike both the Scholastic syllogistic and contemporary logic, is based on content rather than form. Descartes had very little interest in formal rules allowing the transformation from one sentence form to another; he was instead interested in how the truths of particular ideas are related to one another, and this required him to consider the *content* of those ideas. Yet despite his acknowledgement of this feature of Descartes' logic, Owen's account does not emphasize the *content* of deductions, i.e., the actual ideas that are intuited and deduced. Owen explains the certainty of deductions only by appeal to the *form* (as it were) of our cognition of them; deductions acquire certainty to the extent that they share the characteristic phenomenology of intuitions. Owen makes good strides toward answering our first question concerning the level of certainty for the conclusion of a

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we will retain the contemporary picture of deductions having premises at the top and conclusions and the bottom.

34   *Second Replies*, AT VII 156 CSM II 111.

35   *Second Replies*, AT VII 156 CSM II 110. The most thorough treatment of this feature of analysis in Descartes is Smith (2010, Ch. 2).

deduction. However, the "phenomenological simplicity" answer to our second question is unsatisfying, and Owen is silent with regard to our third question concerning the nature of the connection between the links in a deduction.

We maintain that an adequate answer to the third question—i.e., an account of how ideas are connected in a deduction—should provide a *contentful* explanation to supplement Owen's account of the relative certainty of deductive conclusions. Owen's description of certainty as produced by mental simplicity and effortlessness is not incorrect as far as it goes, but is incomplete. For the phenomenon of mental simplicity can itself be further explained by Descartes' metaphysics of ideas. The answer to our third question about the connection between links in a deduction will provide the resources for adequate responses to our first and second questions concerning the degree of certainty in a conclusion and the *source* of this certainty. Contrary to Wong, who claims that certainty is a result of surveyability, we will argue that the doubt and uncertainty of long deductions comes from the *composite* nature of the conclusions of such deductions. It is this characteristic of the *ideas* found in the deduction that explains the relative ease or difficulty of running through the deductive steps.

Wong holds that inferential steps consist of knowledge that two different simple natures are connected. We claim however that the ideas connected have the very same nature and that this provides an elaboration of the necessary linkage between steps in a deduction. In a discussion of mathematical deduction Descartes writes:

> . . . we are not expecting to obtain knowledge of any new entity; our intention, rather, is simply to reduce the proportions, however complicated, to the point where we can discover some *equality* between that which is unknown and something known.[36] (emphasis added)

But it seems the point can be generalized from the mathematical context. So we can say that the ultimate purpose of a deduction is not to find a connection between two *different* natures, it is rather to find a connection between something known and something unknown by identifying a nature that is shared by both of the ideas being compared. This point will be crucial in the following demonstration of how the conclusion of a Cartesian deduction is "contained" in the premises. And the account of containment will, in turn, be central in the Cartesian response to the Paradox of Deduction.

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36   *Rules*, AT X 447, CSM I 62.

Although Descartes often speaks in the *Rules* of connections between propositions, we should not attribute to him any robust conception of linguistic entities comparable to those investigated by contemporary analytic philosophers. Owen rightly notes "Descartes is not concerned with the [contemporary] distinction between ideas and propositions".[37] Propositions for Descartes are just nominalizations of ideas, pieces of speech that help direct our attention towards an idea. Indeed he speaks of "ideas by means of which the individual meanings of our words are to be conveyed to our intellect".[38] Since Cartesian deductions are sequences of perceived ideas, Descartes' general theory of ideas will prove valuable in solving our interpretive puzzles. The next section reviews the aspects of this theory that are involved in Descartes' account of deduction.

4   Descartes' Theory of Ideas: An Interpretation

Descartes puts much weight on his rationalistic theory of innate ideas. These are the ideas of which we can have the highest possible certainty, for these "certain primary seeds of truth [are] naturally implanted in human minds".[39] In later works, notably the *Fourth Meditation*, Descartes more fully explains how our innate equipment is guaranteed to yield the truth when it is properly used. This means that if we methodically arrive at an intuition of one of these primary items, the result is maximally certain truth. A special characteristic of an innate idea is that it is completely *simple*, in the metaphysical sense—it is not a combination of several ideas, but rather stands as a single, unified idea with no component parts. Innate ideas are the objects of those perceptions that are maximally clear and distinct. Recall Descartes' explanation of the term 'clear and distinct perception':

> I call a perception 'clear' when it is present and accessible to the attentive mind—just as we say that we see something clearly when it is present to the eye's gaze and stimulates it with a sufficient degree of strength and accessibility. I call a perception 'distinct' if, as well as being clear, it is so sharply separated from all other perceptions that it contains within itself only what is clear.[40]

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37   Owen, *Hume's Reason*, p. 19 fn. 19.
38   *Rules*, AT X 443, CSM I 59.
39   *Rules*, AT X 376, CSM I 18.
40   *Principles* I 45, AT VIIIA 22, CSM I 207.

Innate ideas are *distinct*, then, because of their simplicity, for they are pure and involve no other ideas in combination, i.e. they are "sharply separated" from other ideas. Also, innate ideas are *clear* because when they are perceived, the will automatically assents to them; they "stimulate the mind," as it were, with "a sufficient degree of strength." For Descartes a perception is clear and distinct if and only if the will invariably assents to the idea perceived, and innate ideas are the only ideas of which we can have clear and distinct perceptions.[41]

This reading of Descartes' theory of ideas ties into his account of deduction. Intuitions for Descartes must be clear and distinct perceptions, so intuitions are perceptions of innate, simple ideas. This is evident from the requirements placed on intuition: "two things are required for mental intuition: first, the proposition intuited must be clear and distinct; second, the whole proposition must be understood all at once, and not bit by bit".[42] Innate ideas, due to their simplicity, meet both of these requirements. Descartes adds further "these simple propositions must occur to us spontaneously".[43] We should take two points from these statements: 1) intuitions are of *innate* ideas because they occur to us spontaneously—we do not discover them through sense perception or by constructing them from simpler items, and 2) these ideas are such that our will automatically assents to them for, again, they "spontaneously occur" to us without requiring deliberation. Notice that this account is different from those of the previously mentioned commentators, some of whom take intuitions to be ideas that are judged to be true with very little effort. In fact, although removing confusions and prejudices takes effort, intuition requires *no* effort whatsoever for the will invariably assents without any deliberation.

The number of innate ideas is surprisingly small; indeed "there are very few pure and simple natures which we can intuit".[44] In the *Principles*, Descartes recognizes only three "substances" (i.e., simplest natures) at I 54: God (infinite substance), finite extension, and finite thinking.[45] Although this list appears remarkably short, Descartes claims that all possible subjects of thought are in some way composed from the small stock of innate ideas: "it is not possible for

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41   Descartes sometimes writes as though perceptions can be scaled according to the degree that they are clear and distinct. We are here concerned with maximally clear and distinct perceptions. For more textual defense of the central points required by this interpretation of Descartes' theory of ideas, see Nelson, "Descartes' Ontology of Thought," and Nelson, Alan. "Cartesian Innateness," in *A Companion to Descartes*, Broughton, Janet and Carriero, John (eds.). Oxford: Blackwell, 2008, pp. 319–332.

42   *Rules*, AT X 407, CSM I 37.

43   *Rules*, AT X 428, CSM I 50.

44   *Rules*, AT X 383, CSM I 22.

45   AT VIIIA 25–6, CSM I 211.

us ever to understand anything beyond those simple natures and a certain mixture or compounding of one with another".[46] But if there are very few innate ideas that can be combined in a limited number of ways, how are we able to think many thoughts? Sensation admits of great diversity. The diversity of nonsensory thought is produced by, or constructed from, the many clearly and distinctly perceived *attributes* of the substances and *their* various combinations.

An *attribute* for Descartes is constituted by the manner in which we perceive a substance. There is, however, only a distinction of reason between an attribute and its substance, so attributes are not to be reified as separate entities.[47] Recall that a distinction of reason, according to Descartes, is made when one cannot perform a mutual exclusion in thought between an attribute and a substance, i.e., when one cannot clearly and distinctly perceive an attribute while simultaneously withholding assent from a substance. Lawrence Nolan brings out this point:

> In [*Principles* I] article 55 ... Descartes says that we can have a clear and distinct idea of attributes like duration, order, and number only if we regard them as ways of conceiving things which endure and are ordered and numbered, and not as substances in their own right. This implies that we cannot clearly and distinctly perceive one of these attributes if we were to exclude the thing or substance to which it belongs.[48]

The distinction between an attribute and its substance, then, is made only in thought, but is nothing in reality, since "we produce a rational distinction in our thought by taking a substance which is simple, and not diverse in itself, and regarding it in diverse ways" (Nolan 1998, p. 167). Thus, attributes are in reality identical to their substances. We can perceive innumerable attributes[49]

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46   *Rules*, AT X 422, CSM I 46.

47   Nolan notes that "attributes ... are not entities distinct from substances outside the mind, nor are they entities within the mind ... the notion of a rational distinction is intended to capture ... this idea that there are various clear and distinct ways of regarding a substance which lead us to speak of its having diverse attributes." Nolan, Lawrence. "Reductionism and Nominalism in Descartes' Theory of Attributes." Topoi, 16 (1997): 129–40, p. 138. See also Nolan, Lawrence. "Descartes' Theory of Universals," *Philosophical Studies*, 89 (1998), pp. 161–80.

48   Nolan, "Reductionism and Nominalism," p. 135.

49   We can also perceive innumerable 'modes' with respect to these attributes. See Nolan, "Reductionism and Nominalism," and Sowaal, Alice. "Cartesian Bodies," *Canadian Journal of Philosophy*. Vol. 34, No. 2 (2004), pp. 217–240, for an exposition of the modal, real, and rational distinctions, and their ontological consequences. For more on the theory of

by arriving via different cognitive routes at clear and distinct perceptions of the few simple substances. It is through his theory of attributes, then, that Descartes recovers a wide diversity of non-sensory thought.

Descartes' understanding of the complementarity between attributes and rational distinctions deserves some further elaboration. Attributes are not intrinsic characteristics or properties of substances.[50] Indeed, since innate ideas are perfectly simple, they cannot have any intrinsic diversity of properties, but must have a pure nature. Rather, an attribute is determined by the cognitive route we take in arriving at a perception of the substance. This route followed *in thought* determines an attribute, but outside of thought there is no distinction to be made; the attribute and the substance are identical. This means that the clear and distinct perception of an attribute will result in the automatic affirmation of the will, for the perception of an attribute *is* the perception of a simple substance. In his writings Descartes has different names for these attributes depending on the context, sometimes calling them "essences," "principles," or "primary notions."[51] In the *Rules* he generally calls them "natures". What is important to remember about these natures is that they are simple.

Although attributes provide us with a much larger set of potentially clear and distinct perceptions, not all perceptions are clear and distinct in the highest degree. Perceptions are positioned on a scale of clarity and distinctness; to the extent that a perception is less than maximally clear and distinct, it is to that degree "confused and obscure".[52] While a *distinct* perception is self-contained and sharply separated from all other perceptions, a *confused* nature does not exhibit any such sharp separation; boundaries between several natures are overlapped or mixed together such that it is not clear where one nature ends and another begins. The object of such a confused perception can be thought of as a non-simple nature, that is, a nature fused together with other structure. This composition of multiple perceptions can ultimately be resolved into simple natures. While a *distinct* perception is of a nature so simple that the will

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attributes, see also Nolan, "Descartes' Theory of Universals," and Lennon, Thomas. "The Rationalist Conception of Substance," in *A Companion to Rationalism*, Nelson, Alan (ed). Malden, MA: Blackwell, 2005, pp. 12–30, and Lennon, Thomas. *The Plain Truth*. Leiden: Brill, 2008, pp. 175–77.

50   Here we continue to follow Nolan et al. For an opposing interpretation of Descartes on attributes see, e.g., Hoffman, Paul."Descartes' Theory of Distinctions," *Philosophy and Phenomenological Research*, 64 (2002), pp. 57–78.

51   See Nelson, "Cartesian Innateness," for an account of these terminological differences.

52   For a discussion of Descartes' use of this terminology, see Cunning, David. *Argument and Persuasion in Descartes' Meditations*. New York: Oxford University Press, 2010, pp. 15–23.

immediately assents to it, the will is not compelled to assent to an *obscure* idea, because such a perception is a confusion of natures, so our attention cannot focus clearly on any absolutely simple underlying nature.[53]

Descartes utilizes several interrelated degree scales in his theory of ideas and these play a crucial role in his account of deduction. The scales each have a highest degree. All other gradations are measured according to the degree to which they are removed from this ultimate level. Two such scales have already been introduced. Innate ideas are metaphysically *simple* in the highest degree (or "maximally simple" [*maxime simplices*])[54]—their nature is absolutely pure. They can accordingly be intuited in a special way since, as we have seen, intuition is connected with the simplicity of its object. All other ideas are to some degree removed from these innate ideas to the extent that they are *composite* configurations of various simple natures:

> . . . we term 'simple' only those things which we know so clearly and distinctly that they cannot be divided by the mind into others which are more distinctly known. Shape, extension and motion, etc. are of this sort; all the rest we conceive to be in a sense composed out of these.[55]

As just noted, perceptions of ideas are arranged on an associated scale. The perception of a maximally simple idea *as* maximally simple (i.e. not compounded with other ideas) is *clear and distinct* in the highest degree. The more complex the idea, the more *confused and obscure* our perception of it becomes. Two other scales—of *certainty/doubt* and *truth/falsity*—are also related.[56] We are absolutely certain of an idea when it stimulates us with a sufficient degree of strength such that we invariably assent to it; the will affirms such an idea turning away from even the most hyperbolic doubt. Since "it is possible to have . . . knowledge which is certain only of things which are entirely simple and absolute",[57] we can be maximally certain about the nature of simple ideas. To the extent that an idea is composite, it is subject to doubt. Since "simple natures are all self-evident and never contain any falsity",[58] this means that

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53   See Nelson, "Descartes' Ontology of Thought," for a discussion of how multiple perceptions can be composed into a single perception that is confused and obscure.

54   AT X 383, CSM I.

55   *Rules*, AT X 418, CSM I 44.

56   The next section will introduce two more associated scales: *absolute/relative* and *knowledge/ignorance*.

57   *Rules*, AT X 394, CSM I 29.

58   *Rules*, AT X 420, CSM I 45.

falsity and uncertainty in perceptions are products of a confused nature, for "we can go wrong only when we ourselves compose in some way the objects of our belief" (*Rules*, AT X 423, CSM I 45).

These scales will be deployed in the following sections to show that, in a Cartesian deduction, the degree of certainty of a deductive conclusion varies with the metaphysical simplicity or composition of that concluding idea's nature.

5 Deductive Links and Shared Natures

The machinery from Descartes' theory of ideas can now be utilized in a characterization of the connections between links in a deduction. We begin by looking at a single inferential link, and in the next section this account will be applied generally to an entire deduction. When performing a deduction "our project . . . [is] to compare [natures] with each other so that some may be known on the basis of others."[59] This is true for both a single link and an entire deduction, which for Descartes is just an ordered sequence of inferential links. At each step of a deduction, we compare natures (i.e. ideas) in order to find a connection between them. Let's examine the smallest link, that of a deduction that only involves two ideas. We are trying to find a connection between the two such that one of the ideas can be known on the basis of the other. What does Descartes mean by "knowing," or having *scientia*, in this context? The answer, which is crucial for Descartes' resolution of the Paradox of Deduction, is that to know a thing is to clearly and distinctly perceive its nature or essence. This is shown in Descartes' description of the deduction of the true nature of a magnet:

> . . . take someone who thinks that nothing in the magnet can be known which does not consist of certain self-evident, simple natures . . . he carefully gathers together all the available observations concerning the stone in question; then he tries to deduce from this what sort of mixture of simple natures is necessary for producing all the effects which the magnet is found to have. Once he has discovered this mixture, he is in a position to make the bold claim that he has grasped the true nature of the magnet, so far as it is humanly possible to discover it on the basis of given observations.[60]

59   *Rules*, AT X 381, CSM I 21.
60   *Rules*, AT X 427, CSM I 49–50.

When comparing two ideas through a link in the chain of a deduction, we attempt to arrive at knowledge (i.e., a clear and distinct perception) of the nature of *B* on the basis of our knowledge of *A*: "in every problem there must be something unknown . . . the unknown something can be delineated only by way of something else which is already known".[61] The point of the exercise is to connect the ideas in such a fashion that one can understand the unknown *B* as a "consequence" or as "following from" the known *A*: "the unknown terms in the problem are so dependent on the known ones that they are wholly determined by them".[62] Here, then, Descartes introduces another scale related to those previously mentioned, which measures degrees of *knowledge* and *ignorance*. Some things are known better than others, to the extent that their simple natures, or the simple natures composing them, can be clearly and distinctly perceived.[63] Since "all knowledge [*scientia*] is certain and evident cognition",[64] only intuitions of innate ideas provide perfect knowledge. Thus, we are ignorant of the underlying nature of an idea to the extent that its nature is an unresolved composite.

In a comparison between two natures, one is taken to be "absolute" with respect to the other, which is understood as "relative" to the first:

> I call 'absolute' whatever has within it the pure and simple nature in ques-
> tion . . . I call this the simplest and the easiest thing . . . the 'relative', on the
> other hand, is what shares the same nature, or at least something of the
> same nature, in virtue of which we can relate it to the absolute and
> deduce it from the absolute in a definite series of steps.[65]

When we find an absolute/relative pair, we recognize the same nature in both ideas, although often to different degrees. The absolute idea *A* is seen as simple relative to *B*, which is seen as a composite containing *A*:

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61   *Rules*, AT X 430, CSM I 51–52.

62   *Rules*, AT X 461, CSM I 71.

63   There are other ways in which one thing might be said to be "better known" than another.
      One might, for example, say that the mind is better known than the body because it is the
      first to become certain when philosophizing in the correct order, or because more of its
      attributes are known.

64   *Rules*, AT X 362, CSM I 10.

65   *Rules*, AT X 381–2, CSM I 21.

> This common idea [i.e., simple nature] is carried over from one subject to the other solely by means of a simple comparison, which enables us to state that the thing we are seeking [the nature of the relative idea] is in this or that respect similar to, or identical with, or equal to, some given thing [the nature of the absolute idea].[66]

In such a comparison the nature that is composite and relative is first seen confusedly as if simple, and then as a distinct combination of the absolute nature with other elements. In other words, the relative nature is in fact a combination of the absolute nature with other ideas as well. Because of the other natures in B obscuring the simple, absolute nature in question, our perception of this simple nature in B is less than perfectly clear and distinct, since it is not "sharply separated from all other perceptions [so] that it contains . . . only what is clear".[67] This means that we know B less than we know A on the relevant scale of knowledge. In these inferential comparisons, we come to know the relative through the absolute. The absolute nature, which is simpler and thus better known, provides the means for making intelligible the confused relative nature. In this general example of a one-step deduction we have now shown how new knowledge of the deduction's conclusion is obtained. We understand it as literally containing as a component the premise, which is already known because it is a simple and evident nature.

It should be noted that for Descartes, the terms 'absolute' and 'relative' are *themselves* relative: "everything, with regard to its possible usefulness to our project, may be termed either 'absolute' or 'relative'—our project being, not to inspect the isolated natures of things, but to compare them with each other so that some may be known on the basis of others".[68] In a single link we could regard C as relative to B (or equivalently, B as absolute with respect to C). But further up the deduction we might also regard B as relative to another idea A (the same thing as regarding A as absolute with respect to B). To regard A as absolute with respect to B is to understand A as having a simple, unified nature (although this nature might not in fact be simple in the highest degree), and to perceive B as containing A.[69] The absolute/relative scale is correlated with

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66   *Rules*, AT X 439, CSM I 57.

67   *Principles* I 45; AT VIIIA 22, CSM I 207.

68   *Rules*, AT X 381, CSM I 21.

69   This is, again, a literal sense of 'containment'. It is usual to speak instead of premises "containing" conclusions as part of their content. This reversal is, according to the present interpretation, part of what is radical about Descartes' theory of inference.

the simple/ composite scale, for *B* is regarded as relative to *A* if and only if the nature of *B* is understood as being combined with the nature of *A*. Intuitions exhibit natures that are so simple that "there can be no room for doubt about what we are understanding".[70] This simplicity prevents the object of an intuition from being a composite of other natures; thus, an intuition cannot be seen as relative to some other perception. Intuitions therefore have the special status of being "absolute in the highest degree" and maximally clear and distinct.[71] Correspondingly, the natures perceived by intuition are simple in the highest degree. This raises a question about how the conclusion of a deduction can be intuited given that it is relative to the premise. We shall return to this after explaining the linkage between the steps of deduction in more detail.

6   Constructing a Deduction

It is important that we first master these short, one-step deductions before proceeding to more complicated deductions: "It is necessary that we examine whatever constitutes an integral step in the series through which we must pass when we proceed from relative terms to something absolute or *vice versa*, before considering all that follows in the series".[72] After completing multiple short deductions, each involving the comparison of two ideas, where one is perceived to be relative to the other, it may be possible to construct longer deductions by arranging several comparisons in an orderly sequence. For example one might construct an ordering in which *C* is perceived as a composite including *B*, and *B* is perceived as a composite including *A*. By linking these steps together, we get something new: *C* is now understood as a composite including *A*. This step forward constitutes new knowledge, for we have come to realize something previously unknown about the nature of *C*. We may even try to further extend this sequence to reach natures still more absolute than *A*. By doing so, we will come to understand *C* as being a composite of (i.e., sharing the same nature as) simpler and simpler natures. Since these natures are known better or worse corresponding to their level of simplicity, each step in the deduction connects the conclusion *C* to better-known premises.

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70   *Rules*, AT X 368, CSM I 14.

71   This might also be translated as "maximally absolute" [*maxime absolutum, Rules* AT X 382, CSM I 22]. Descartes also refers to "completely absolute first principles" [*primus & maxime absolutis principiis; Rules*, AT X 410, CSM I 33].

72   *Rules*, AT X 392, CSM I 28.

For Descartes the degree to which a deduction produces new knowledge concerning the conclusion depends on the extent to which the nature perceived in the highest premise is simple. Thus, a deduction is maximally illuminating if the highest premise of the deduction is simple in the highest degree (that is, if it is a perfect intuition), and this connection between the conclusion and premise is absolutely clear. Such is the case if we can make only a distinction of reason between the premise and conclusion (i.e., if a clear and distinct perception of the premise cannot be explicitly excluded from a clear and distinct perception of the conclusion). In performing this maximally illuminating deduction we succeed in following a cognitive route from a previously confused and obscure idea to one that is maximally clear and distinct, and thereby discover another cognitive route to an innate idea. This deduction enhances knowledge because we have succeeded in connecting the various lower natures of the deduction to one that is self-evident and completely certain:

> We should . . . attend carefully to the simple natures which can be intuited . . . for these are the ones which in each series we term simple in the highest degree. As for all the other natures, we can apprehend them only by deducing them from those which are simple in the highest degree, either immediately and directly, or by means of two or three or more separate inferences [*conclusiones*].[73]

The actual construction of a deduction, however, does not begin with an intuition and end with confused natures. The process actually happens in the opposite direction, starting with analysis of composites and then later moving on to the synthesis of composites from simples.

In the analytic stage of constructing a deduction we begin with an idea *Z* that is unknown to the extent that our perception of its nature is confused and obscure. The purpose of a deduction is to make *Z*, our conclusion, known or at least better known. We do this by analyzing the (composite) nature of *Z*, trying to determine what natures can be seen as absolute with respect to *Z*. In order to determine what in *Z* is simple, we abstract away the external layers of *Z*'s nature that do not stimulate our minds with a sufficient degree of strength: "we must discard from the [idea] . . . whatever does not demand our present attention, so that the remaining features can be retained more readily".[74] Earlier we saw that when a nature is perceived which is simple in the highest degree, the will automatically assents to this idea. Thus, if we find an aspect of *Z* that

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73   *Rules*, AT X 383, CSM I 22.
74   *Rules*, AT X 417, CSM I 43.

can be denied, which does not *demand* our attention, then that aspect is not simple. Such an aspect must be abstracted away so that we may discover the underlying simple nature of *Z*.

If, in our analysis, we find a nature in *Z* that cannot be excluded or denied without denying *Z* itself, then this constitutes the discovery of a higher nature, *Y*, which is simpler than *Z* and stands in the relation of being absolute with respect to *Z*. We might also say that *Y* is essential to *Z*, although strictly speaking only maximally simple natures are ultimately essences. This successful first step is generally not the end of our deduction, for *Y* will usually also be to some (lesser) extent confused and obscure. We can then follow the procedure again in order to find a nature *X* that is absolute with respect to *Y*. This procedure can continue until finally we reach an intuition, *A*, of a nature that is simple in the highest degree. This is the most important discovery of the whole process, for we have now placed a series of ideas in an ordering that ranges from most relative to most absolute. This ordering should make it very easy to discern the simplest nature contained in the conclusion, for the conclusion can now be obtained as the last step of a synthetic, progressive series of ideas. The series is arranged according to the degree in which the steps include the simple, self-evident nature found at the beginning of the series. This is what makes the deduction *simple* (both metaphysically and phenomenologically), for the series is now arranged such that one need only recognize a *single* nature contributing in higher and lesser degrees to the ideas found in the series, and this task is straightforward:

> ... with the aid of the unit [simple nature] we have adopted, it is sometimes possible completely to reduce continuous magnitudes to a set and ... this can always be done partially at least. The set of units can then be arranged in such an order that the difficulty involved in discerning a measure becomes simply one of scrutinizing the order. The greatest advantage of our method lies in this progressive ordering.[75]

This is why deduction, when most illuminating, comes to approximate intuition, because it crucially involves the clear and distinct perception of *one* simple nature in each step.[76]

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75   *Rules*, AT X 452, CSM I 65. This text appears in a mathematical context, but it can be generalized as indicated by understanding the "unit" to be the single nature that is present in each step of an inference.

76   Descartes uses 'deduction' as a success term; there are no incorrect deductions. But one might be more or less successful in maintaining one's mental grasp of a deduction.

Once the hard work of analysis is complete, we can easily perform a synthesis by tracing our steps back again in the opposite direction, starting with the intuition A and proceeding to the conclusion Z.[77] In this way we come to know Z better, increasing the degree of our knowledge of its nature. Remember that for Descartes to know something is to clearly and distinctly perceive its nature, so we come to know Z better by discovering that its underlying, obscured nature can be understood as identical to a nature that we are able to perceive perfectly in an intuition. Since each of the steps of the deduction show us that a relative idea shares the identical nature as an absolute idea, this entire deduction is able to show us that Z is relative to A. This in turn shows that Z is a composite of A along with other confused elements that, prior to deduction, obscured the fact that A is included in Z. The necessary linkages between the steps of the deduction, therefore, consist in each step's including A—the shared nature. To the extent that we can see this connection, we come to know Z. Of course we cannot know Z in the highest degree, because it is a confusion, i.e., a composition, of several natures. But with our deduction we have increased our knowledge of Z's nature to the extent that we can see it as sharing the same nature as A.

Let us now investigate how we might increase the level of certainty for a deduction. We earlier saw both Owen and Wong argue that the certainty of a deductive conclusion with respect to the premise can be increased by regularly practicing the inferential steps so that they become effortless. The easier performing the deduction becomes and thus the more closely the performance approximates the exertion required for an intuition, they argue, the more certain a deduction becomes. It is true that practice will often be involved in the attempt to raise the certainty of deductions. But our account of Cartesian deduction above provides the resources for a deeper, metaphysical explanation for the certainty of deduction that says something more than "practice makes perfect". The certainty of deduction, we have argued, comes from our ability to see the conclusion as sharing the same nature as the premise. This is usually an easier task when deductions are shorter rather than longer. If an analysis from a conclusion to an intuition is especially long and difficult, this is likely because the conclusion's nature is significantly complex. The more complex an idea, the more difficult it is for us to clearly perceive its nature. The longer a deduction, the more confusion and obscurity will be involved, so working through long deductions can be very strenuous. On the other hand, very short deductions may prove to be fairly easy. If the natures involved are very high on the scale of simplicity, we can apprehend them quite easily,

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77   Recall Descartes' description of this two-stage process (quoted above on pp. 115–16).

indeed almost automatically to the extent that they approach simplicity in the highest degree. When Descartes states that "because [intuition] is simpler, it is more certain than deduction",[78] he is describing not only the relative ease of effort in performing an intuition as compared to a deduction, but also the fact that intuition involves perceiving an object that is metaphysically simpler than those which are perceived in deduction.

Rehearsing the order of inferential steps can of course help make longer deductions easier to perform. Descartes indeed suggests that it is useful to run through "deductions in a continuous and completely uninterrupted train of thought".[79] But later in the section, Descartes explains what makes this the case by describing what actually happens when we practice deductions:

> One cannot fail to see that in this way the sluggishness of the mind is redressed and its capacity even enlarged. But in addition we must note the *greatest advantage* of this [procedure] lies in the fact that by reflecting on the mutual dependence of simple propositions we acquire the habit of distinguishing at a glance what is more, and what is less, relative, and by what steps the relative may be reduced to the absolute.[80]

So by practicing a deduction we increase the certainty of the conclusion because we get better at seeing the simple nature that serves as a single unifying strand through the whole deduction. To the extent that we can look at a deduction and immediately see *one* simple nature, which by its simplicity compels our assent, we have made our deduction more like an intuition: ". . . it is by means of *one and the same idea* that we recognize in different subjects each of these familiar entities [simple natures]".[81] [emphasis added] The certainty of the deduction, then, is increased to the extent that we can immediately see a simple nature shared by both the conclusion and the premise. If this connection presents itself as immediate, then what once was a long and complex deduction now becomes short and simple. If the connection is instead viewed by a mental motion, the motion itself is simple because it begins with an absolute nature and proceeds to the very same nature in each step. This nicely explains why deductions can be understood both as involving a mental sweep of the steps and as a single intuition,

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78   *Rules*, AT X 368, CSM I 14.
79   *Rules*, AT X 407, CSM I 37.
80   *Rules*, AT X 409, CSM I 38, emphasis added.
81   *Rules*, AT X 439, CSM I 57.

But when we think of the process of deduction as we did in Rule Three, it does not seem to take place all at once: inferring one thing from another involves a kind of movement of the mind. In that passage, then we were justified in distinguishing intuition from deduction. But if we look on deduction as a completed process, as we did in Rule Seven, then it no longer signifies a movement but rather the completion of a movement.[82]

Practicing a deduction is not mindless, rote memorization, but rather becomes more intense as we perfect our ability to reveal and recognize a simple, clearly and distinctly perceivable nature within a confused and obscure idea. Indeed, Descartes distinguishes his own method from Scholastic syllogistic by claiming that memorization encourages one's contemplation of truth to become lax, while his system demands intense study and reflection:

Our principal concern here is thus to guard against our reason's taking a holiday while we are investigating the truth about some issue; so we reject the forms of reasoning just described as being inimical to our project. Instead we search carefully for everything which may help our mind to stay alert."[83]

Contrary to Owen and Wong, we interpret Descartes' note that "deduction *in a sense* gets its certainty from memory"[84] [emphasis added] not as a description of deduction at its best, but rather at its worst, i.e., deduction gets its (relatively low) level of certainty from memory when forced to rely on it. And if we do find a deduction in which we need to rely on memory, the certainty comes not from mental "muscle memory," i.e., remembering *how* to perform the deduction, but rather from *what* we are remembering—the *nature* being shared by both the premise and conclusion. Descartes might have more clearly stated the above point by saying that deduction is doubtful to the extent that it relies on memory, and certain to the extent that it does not. Indeed, he later says something just like this: "it is necessary that I run over [the steps of a deduction] again and again in my mind until I can pass from the first to the last so quickly that memory is left with practically no role to play, and I seem to be intuiting the whole thing at once."[85] Intuition does not require memory at all;

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82   *Rules*, AT X 407–8, CSM I 37.
83   *Rules*, AT X 405–406, CSM I 36.
84   *Rules*, AT X 370, CSM I 15.
85   *Rules*, AT X 409, CSM I 38.

one immediately assents to the idea present without contemplation. To the extent that one is able to see a *single*, simple nature throughout the links of a deduction, one has replicated the simplicity (both metaphysical and phenomenological) found in intuition, which has no need to rely on memory. However, to the extent that we are unable to see a single nature in the inferential steps, we must rely on memory to help us recall what natures we perceived earlier in the deduction. Thus, a deduction has less certainty to the extent that its performance is reliant on the faculty of memory.

This metaphysical basis for the certainty of deduction, we believe, provides a deeper explanation than mere reference to practice and memorization. While it is true that practicing a deduction will usually make the conclusion more certain, and while it is true that practice will make the performance of deductions almost effortless, this is not the whole story. We now have an explanation for *what happens* when we practice deductions: we get better at perceiving a single simple nature unifying the entire deduction. And we have seen how this feature explains *why* practiced deductions can become effortless: because the simpler a nature is, the more automatically the will assents to it.

We now return to the question about intuiting conclusions that was left at the end of Section 5. We have argued that the success of a deduction depends on being able to intuit the maximally simple nature, i.e. the premise, in every step. This means that a deduction is finished when the premise is intuited as the essential element of the conclusion. Now it might appear problematic that the conclusion is not intuited *qua* conclusion, but only *qua* maximally simple nature. If for example we deduce *magnet* from the innate nature *extension*, and each step of the deduction just is an intuition of *extension*, it seems that *magnet* will still be confused and unintuited. Relative to the perfect simplicity of *extension, magnet* will be a combination of a very large number of natures—a number so large that they cannot be intuited together as one magnetic nature.

This puzzle is resolved by our ability to go back and forth in our thought between a naïve perception of the conclusion (or any intermediate step) and our resolving or "distinctifying" that naïve perception into an intuition of the maximally simple nature. In this way, we can appreciate for example that magnets in general, or even the lodestone on this table, follow from *extension* and are essentially extended. This moving back and forth between perceptions should be easy given that the construction of a synthetic deduction is preceded by an explicit analysis of the conclusion to the premise by a series of steps. To the degree that one is unskilled at shifting attention between the conclusion *qua* "containing the simple nature" and the conclusion *qua* "conclusion that was to be deduced," one must rely on one's memory thereby injecting uncertainty into the procedure.

7   The Paradox of Deduction

All of the above work now makes Descartes' resolution of the Paradox of
Deduction fairly straightforward. The Paradox suggests that the two follow-
ing statements contradict each other: 1) in a valid deduction, the conclusion is
contained in the premises, and 2) valid deductions can be useful in expanding
knowledge by providing novel conclusions. We saw that Descartes provides an
account of deduction that is quite different from that of Scholastic syllogistic
or modern formal logic. It is assumed in formulating the Paradox of Deduction
that deduction is an intrinsically formalizable procedure. Descartes' reso-
lute anti-formalism explains why Descartes has such an easy solution to the
Paradox.

   Let us see how Descartes interprets and defends statements 1) and 2).
Regarding 1), he does hold that the conclusion of a deduction is contained in
the premise. A maximally illuminating deduction for Descartes connects the
conclusion with an intuited premise by displaying how the conclusion can
be understood as relative to the premise. That is, the deduction displays that
the conclusion's nature is a confusion of the nature that is simple in the high-
est degree with the other natures that distinguish the conclusion from that
simplest nature. A Cartesian deduction will make it absolutely clear that the
conclusion and the intuition share the same, identical nature. It is in this way
that the conclusion is "contained" in the premise. (As noted earlier, there is
also the more literal sense in which the premise is "contained" as an element
of the composite conclusion.) Descartes points out that in deduction "our
intention . . . [is to] discover some equality between that which is unknown
and something known."[86] That "equality" is the nature shared between the
premise and conclusion. The conclusion of a Cartesian deduction does not add
anything new that is not already found in the premise:

> . . . whenever we deduce something unknown from something already
> known, it does not follow that we are discovering some new kind of
> entity, but merely that we are extending our entire knowledge of the
> topic in question to the point where we perceive that the thing we are
> looking for participates in this way or that way in the nature of the things
> given in the statement of the problem.[87]

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86   *Rules*, AT X 447, CSM I 62.
87   *Rules*, AT X 438, CSM I 56.

A complete deduction forces one's thought to move automatically from cognition of the conclusion to cognition of the premise, and vice versa. To the degree that this transfer of thought is inevitable, the conclusion and premise cannot be mutually excluded. Therefore, there is only a distinction of reason between these cognitions; they are distinguished only *in thought*. But if the conclusion and premise are *only* distinct in thought, then they are identical in reality. So to the extent that the conclusion of a deduction is seen to be identical to the premise, anything to be found in the conclusion must already be contained in the premise. Another way of putting this is to say that the conclusion cannot be of something *essentially* different from the premise.[88] The conclusion of a deduction can be only a combination of natures that are all ultimately relative to the maximally absolute nature, or essence.[89]

In the geometrical exposition of the *Meditations* Descartes expresses his interpretation of containment: "when we say that something is *contained in the nature or concept* of a thing, this is the same as saying that it is true of that thing, or that is can be asserted of that thing."[90] The interpretation of Cartesian deduction presented here seems to support this passage. When a deduction is successfully perceived, we come to see that the conclusion "is true of" the premise because the conclusion's nature is *identical* to that of the premise; also, the conclusion "can be asserted" of the premise because the deduction forces a clear and distinct perception of the premise to be automatically followed by a clear and distinct perception of the conclusion. That in turn is the will's invariable affirmation of the concluding idea. This connection between

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88   We have simplified the presentation in this essay by speaking of a deduction having a single premise, but Descartes' method also allows for a conclusion to be deduced from multiple premises. Indeed, Descartes recognizes what a "frequent task" it is "to deduce a single thing from a collection of things" (*Rules*, AT X 417, CSM I 43). While a deduction with only one premise will follow a linear path, the analysis of a deduction to multiple premises will contain branching points, where an idea is analyzed into multiple component natures. A complete analysis of the conclusion requires that each of these branches be individually analyzed up to their intuitive natures. Descartes terms this analysis of an idea into multiple natures an "enumeration".

89   For an illuminating discussion of Descartes' doctrine that essence can be neither divided nor augmented see Lennon, Thomas. "Pandora/or, Essence and Reference: Gassendi's Nominalist Objection and Descartes' Realist Reply," in *Descartes and his Contemporaries*, Ariew, Roger and Grene, Marjorie (eds.). Chicago: Chicago University Press. 1995, pp. 159–181; and Sowaal, Alice. "Descartes's Reply to Gassendi: How We Can Know All of God, All at Once, but Still Have More to Learn about Him," *British Journal for the History of Philosophy* 19(3) (2011), pp. 419–49.

90   *Second Replies*, AT VII 162, CSM II 114.

truth, affirmation, and containment further articulates the sense in which the conclusion is contained in the premise. These points about the conclusion not going beyond the premises intensify the Paradox from that direction. Let us then proceed to see how Cartesian deductions can be useful by providing us with new knowledge.

Often when we propose to deduce an item from known premises, the conclusion is unknown to us in the sense that its nature is confused and obscure. We do not *know* the conclusion insofar as we are not yet clearly and distinctly perceiving its nature or essence or, again, what is maximally absolute with respect to it. When we succeed in showing that the nature of the conclusion is identical to the nature of an intuited idea, we are able to connect the conclusion to something of which we have better knowledge. If we perceive the conclusion as having a nature identical to one that we already know, then we have gained new knowledge of the conclusion. It also, incidentally, gives us a new perspective on the *premise*. The initial analysis of the conclusion that ultimately resolves it into the premise gives us a cognitive route to an intuition of the premise. We then understand it to be absolute with respect to the conclusion. Descartes is quite committed to this being the sole process whereby new truths are discovered: "the whole of human knowledge consists uniquely in our achieving a distinct perception of how all these simple natures contribute to the composition of other things."[91] Discovering new truths is no more than the process of connecting, by means of deduction, the (confusedly perceived) natures of things unknown to the (intuited, distinctly perceived) natures that are already known.

Because a completed deduction requires a new analytic path from a confused idea to a distinct one that is innate, deductions provide us with new cognitive routes to innate ideas. Since these ideas are absolutely true, deduction can expand knowledge as it paves new avenues to the truth:

> . . . those who really possess knowledge can discern the truth with equal facility whether they have derived it from a simple subject or from an obscure one. For once they have hit upon it, they grasp each truth by means of a single and distinct act which is similar in every case. The difference lies entirely in the route followed, which must surely be longer if it leads to a truth which is more remote from completely absolute first principles.[92]

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91   *Rules*, AT X 427, CSM I 49.
92   *Rules*, AT X 401, CSM I 33.

Synthetic deductions reflect the new ways of approaching innate ideas that arise in the preliminary analyses. This is how Cartesian deduction creates new cognitive routes and increases the number of attributes under which we can apprehend the truth.[93]

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93   The connection between cognitive routes to innate ideas and Descartes' theory of attributes is developed in detail in Sowaal, "Descartes's Reply to Gassendi."

Cartesian Trialism on Trial: The Conceptualist Account of Descartes' Human Being

Lawrence Nolan

1   Introduction

According to a standard and widely accepted interpretation, Descartes' human being consists of two really distinct substances, mind and body, which have radically different essences (thought and extension, respectively). This is the doctrine of mind-body dualism.[1] However, some readers have found lurking behind Descartes' official dualism another doctrine, inconsistent with the first, called "trialism." This apt expression was first introduced in this context by John Cottingham,[2] but views about what this second doctrine entails vary, ranging from the weak claim that Cartesian sensations and passions fall under a third notion distinct from the notions of thought and extension, to the stronger claim that there are modes that "straddle" the mind-body composite, to the still stronger claim that the *union* of mind and body constitutes a third type of substance with its own distinctive principal attribute and corresponding modes.[3] I intend to address the strongest of these claims—i.e., that

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1   Or at least one version of it. According to a more general version, which goes beyond the nature of the human being, minds and bodies are the only two kinds of created substances.

2   Cottingham, John. "Cartesian Trialism," *Mind*, 94 (1985), pp. 218–30.

3   For the weak claim, see Cottingham "Cartesian Trialism"; for the stronger claim, see Hoffman, Paul. "Cartesian Passions and Cartesian Dualism," *Pacific Philosophical Quarterly* 71 (1990), pp. 310–33; see also, Richardson, R.C. "The 'Scandal' of Cartesian Interactionism," *Mind* 91 (1982), pp. 20–37; for the strongest claim, see Broughton, Janet and Mattern, Ruth. "Reinterpreting Descartes on the Notion of the Union of Mind and Body," *Journal of the History of Philosophy* 16 (1978), pp. 23–32; Grene, Marjorie. *Descartes among the Scholastics*. Milwaukee: Marquette University Press, 1991; Gueroult, Martial. *Descartes selon l'ordre des raisons*. 2 vols., Paris: Aubier, 1968; Hoffman, Paul. "The Unity of Descartes's Man," *The Philosophical Review* 95 (1986), pp. 339–70; Radner, Daisie. "Descartes's Notion of the Union of Mind and Body," *Journal of the History of Philosophy* 9 (1971), pp. 159–70; Rodis-Lewis, Geneviève. *L'Individualité selon Descartes*, Paris: J. Vrin, 1950; and Schmaltz, Tad. "Descartes and Malebranche on Mind and Mind-Body Union," *The Philosophical Review*, 101 (April 1992), pp. 281–325. Cottingham is careful to distinguish the very weak position he attributes to Descartes from the strongest form of trialism: "Descartes never suggests that the world might contain, in addition to *res extensa* and a *res cogitans*, a *res sentiens* or 'sensing thing'. . . . Descartes recognizes a third category or notion alongside thought and extension without

Descartes is committed to substance trialism—and, henceforth, shall use the term "trialism" to refer to it exclusively.

In an effort to defend the trialist interpretation, a few commentators have tried to link Descartes' thought on this issue to the Scholastic-Aristotelian tradition, which held that the human being is a genuine unity or *ens per se*, a term that the Scholastics and Descartes alike take to be synonymous with "substance." But it is fair to say that the majority of Cartesian scholars have not been convinced, preferring to favor as I do the traditional dualist picture according to which Descartes self-consciously turns his back on the Scholastic-Aristotelian conception of the human being and takes the union of mind and body to consist merely in their causal interaction.[4] As a result of this disfavor, the trialist interpretation has been the target of some thoroughgoing and, in my estimation, decisive refutations.[5] While sympathetic with these critiques, I think that there is something of great philosophical significance that both parties to this debate have overlooked. Descartes does have an account of the status of the union of mind and body—one that goes beyond their causal interaction—but this account is highly deflationary and perfectly consistent with his dualism. I shall argue in this chapter that the mind-body union is *not* a third kind of substance, but that one can, and ordinarily does, regard it as one. At several places in his writings, Descartes maintains that whenever going about one's daily life and not engaged in philosophy, one habitually regards one's mind and body as a single thing. However, this way of regarding the

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proceeding to reify it as a separate substance" (Cottingham 1985, p. 229). But he also suggests that this third category should be conceived as an attribute or "a distinct aspect of a thing's nature," if not a distinct substance (ibid.). In more recent work, he speaks explicitly of "property trialism or attributive trialism," in Cottingham, John. "The Mind-Body Relation," In *The Blackwell Guide to Descartes'* Meditations, Stephen Gaukroger (ed). Oxford: Blackwell Publishing, 2006, pp. 179–92, p. 185.

4   Margaret Wilson calls this the "Natural Institution" theory, according to which "the particular relation between a given human mind and its body is the result of mere correlation by Divine fiat of certain states of one with certain states of (part of) the other" (Wilson 1978, p. 214; for her full discussion, see pp. 205, 207–20). For proponents of this interpretation, see e.g. Alanen, Lilli. "Reconsidering Descartes's Notion of the Mind-Body Union," *Synthese*, Vol. 106, No. 1 (1996), pp. 3–20; Chappell, Vere. "L'homme cartésian," in *Descartes: Objecter et répondre*, J.-M. Beyssade and J.-L. Marion (eds.). Paris: Presses Universitaires de France, 1994, pp. 403–26. (unpublished translation available at http://courses.umass.edu/chappell/pub lications.html); Rozemond, Marleen. *Descartes's Dualism*. Cambridge: Harvard University Press, 1998; and Yandell, D. "Did Descartes Abandon Dualism? The Nature of the Union of Mind and Body," *British Journal for the History of Philosophy*, 7 (1999), pp. 199–217.

5   See Chappell, "L'homme cartésian;" Rozemond *Descartes's Dualism*; Voss, Stephen, "Descartes: the End of Anthropology," in *Reason, Will, and Sensation*, J. Cottingham (ed.). Oxford: Clarendon Press, 1994, pp. 273–306; and Yandell "Did Descartes Abandon Dualism?".

mind-body composite is irredeemably confused and thus cannot be improved upon, or made clear and distinct, by philosophical endeavor. This argument has the consequence that the so-called mind-body "union" is a substance only in a conceptual sense and thus not a genuine unity, contrary to the trialist interpretation.

Descartes' account of how the ordinary person typically regards herself is crucially important for understanding some vexing passages in which he appears to endorse the Scholastic conception of the human being as a hylomorphic unity of matter (i.e., body) and form (i.e., soul). Defenders of Cartesian trialism urge that these passages be taken at face value, while critics suggest that Descartes is dissembling as part of a calculated political strategy designed to win favor with traditionalists. Although I am sympathetic with the latter, I do not think that these passages present such a stark choice if we keep in mind his account of how one ordinarily regards oneself. I shall argue that Descartes self-consciously draws upon this account in order to accommodate the Scholastic conception of the human being within his own philosophical system without compromising his strict dualism.

In the next section, I begin by analyzing Descartes' claim that one ordinarily regards one's mind and body as a single thing or unity. In the course of this discussion, I take up the much-discussed doctrine of primitive notions in which Descartes affirms a special notion of mind-body union. Some commentators have tried to use this doctrine to support Cartesian trialism, but I argue that it constitutes an endorsement of the conceptualist account of the human being. In section 3, I develop systematic reinterpretations of those passages in which Descartes broaches the traditional hylomorphic conception of the human being, with the aim of showing that they are best read as making the conceptualist point that we can *regard* the union as a substance. As a way of bolstering the conceptualist interpretation, in the fourth and final section I develop an analogy between Descartes' account of mind-body union and his treatment of geometrical objects. In the Fifth Meditation and elsewhere, Descartes suggests that we regard geometrical objects as substances and the theorems that can be demonstrated of them as their "properties" even though, strictly speaking, triangles and the like are not substances but merely ideas existing solely in our thought.

2   The Ordinary, Pre-Philosophical Conception of Oneself as a Unity

At a few notable places in his writings, Descartes presents it as a self-evident fact, given in sense experience, that one's mind and body causally interact with each other. The following remark from a letter to Arnauld is representative:

> That the mind, which is incorporeal, can set the body in motion is some-
> thing which is shown to us not by any reasoning or comparison with
> other matters, but by the surest and plainest everyday experience. It is
> one of those self-evident things which we only make obscure when we
> try to explain them in terms of other things.[6]

Many commentators[7] working on the problem of mind-body interactionism
have taken note of this assertion, which is repeated in other passages that we
will consider below. Let's state it as follows:

1) The interaction of mind and body is familiar from everyday experience.

Descartes intends something quite minimal by this claim. He is not making
a deep philosophical point but what he takes to be an obvious phenomeno-
logical one. To take a concrete example, Descartes' claim is that when I will
to move my limbs in a certain direction, I am aware of that act of willing and
of the subsequent movement of my body.[8] Similarly, when my body is injured
I immediately feel the effects of that injury in the form of pain.[9] So what one
experiences in both the case of mental causation of bodily states and the case
of bodily causation of mental states is a correlation between two different
states. Descartes is not claiming to understand *why* one's mind and body inter-
act in this way or, more importantly, *how* this interaction is possible. His claim
is restricted to the bare fact that interaction occurs.

  I have attended carefully to this claim because I want to distinguish it
from the related, but importantly different, view that is the main focus of this

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6   Descartes, René. *Oeuvres de Descartes*. Edited by Charles Adam and Paul Tannery. Paris: Vrin,
    1897–1913, 12 vols.; Rev. ed. 11 vols. *Paris: Vrin.* 1964–76, vol. V, page 222; further references to
    this edition are abbreviated as AT, Roman volume number, Arabic page number; Descartes,
    René. *The Philosophical Writings of Descartes*. Translated by John Cottingham, Robert Stoothoff,
    Dugald Murdoch and Anthony Kenny. 3 vols. Cambridge: Cambridge University Press, 1984, vol.
    III, page 358; further references to this edition are abbreviated as CSM, roman volume number,
    arabic page number.

7   See e.g. Alanen, "Reconsidering Descartes's Notion of the Mind-Body Union"; Gouhier, Henri.
    La pensée métaphysique de Descartes. Paris: Librairie philosophique J. Vrin. 1962, pp. 334–44;
    Garber, Daniel. "Understanding Interaction: What Descartes Should have Told Elizabeth," *The
    Southern Journal of Philosophy*, 21 (1983), pp. 15–32, p. 16; Yandell, "Did Descartes Abandon
    Dualism?," p. 201; Wilson, *Descartes*, pp. 210ff.

8   Descartes tells Arnauld that it is precisely because one is conscious of the union (or interac-
    tion) of mind and body that one wills to move one's limbs (ibid.).

9   Here Descartes speaks only of the mind's action on the body but in other passages, consid-
    ered below, it is clear that he thinks we are also experientially acquainted with the body's
    causal effects on the mind.

section, namely, that prior to engaging in philosophy one regards one's mind and body as a single thing. What follows is one of the most succinct and explicit statements of it: "I had from my earliest years conceived of my mind and body as a unity of some sort (for I had a confused awareness that I was composed of mind and body)" (AT VII:445, CSM II:300). Just a few pages before this assertion, Descartes says that as a result of prejudices formed in childhood, the mind "took thought and extension to be one and the same thing" (AT VII:441, CSM II:297). These remarks are from the Sixth Replies, but one need not look so far, for this naïve, pre-reflective way of regarding oneself is familiar from the *res cogitans* proof of the Second Meditation. Having proven that he exists, the meditator famously asks, "what am I?" To answer this question, he takes up his former conception of himself, prior to meditating, and then determines whether any part of this conception is immune from doubt. What interests us here is not the result of this endeavor—as is well known, the meditator discovers that he is a thinking thing—but this prior conception of himself. Descartes says that he first conceived of himself as having a body, with limbs, etc. that is nourished and moves about. But he also conceived of himself as having a mind or soul. However, he regarded the soul in a peculiar way, "like a wind or fire or ether" that permeates his whole body (AT VII:25–6, CSM II:17). So he regarded his soul as a corporeal substance, albeit a very tenuous one that duplicates his body (one is reminded of how ghosts are portrayed in children's cartoons). As Descartes indicates elsewhere, to treat the soul as corporeal in this way is, in effect, to regard the soul and body as one thing.[10]

Let us state this second claim as follows:

2) Prior to engaging in philosophy, one confusedly regards one's mind and body as a single thing or unity.

Unlike the first claim, this second one has not been properly understood in the secondary literature. Commentators have tended to ignore it, confuse it with the first claim, and/or mistake it for an affirmation of substance trialism. So the first thing to notice is that it is clearly a separate claim from the one stated in 1), though we will examine passages below where the two claims appear together and thus will need to determine the relation between them. As with the first proposition, Descartes intends to be describing something about our pre-reflective life rather than making a metaphysical claim. He is not affirming that mind and body do constitute a genuine unity, only that we ordinarily

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10   As Descartes tells Elisabeth, to conceive of the soul as material "is, strictly speaking, to conceive of its union with the body" (AT III:691, CSM III:226; cf. AT III:694, CSM III:228). And, as he adds in the next breath, to conceive of the union of mind and body is to conceive them as one thing (AT III:692, CSM III 3:227). See further discussion of these passages below.

regard it as one. Moreover, he indicates in the passage from the Sixth Replies that this way of regarding oneself is confused, which, if anything, would suggest that the human being is not a genuine unity.

What relation do these two claims have to each other? One might worry that they are inconsistent. If one ordinarily regards oneself as a single thing then how can it be said that one is acquainted with the interaction of mind and body from everyday experience? To have the relevant experience, mustn't one regard them as two things rather than one? But the inconsistency is only apparent. I noted above that the experience of interaction of mind and body consists in perceiving a correlation between two states. We do not experience them as states *of* two really distinct substances, mind and body. The untutored person is not privy to this distinction, which is discovered only through careful meditation. So when Descartes says that we experience the interaction *of mind and body*, one must remember that the experience in question is being described from the point of view of the mature meditator. Descartes' second claim, which is best understood negatively, reinforces this point. To say that one ordinarily regards oneself as a unity is just to say that one fails to distinguish mind and body when not philosophizing. If we understand these two claims in this way, then the relation between them is simple and straightforward: we experience regular correlations between states of the mind and states of the body. However, we do not experience these as states *of* mind (qua purely thinking) and as states *of* body (qua purely extended thing), for prior to philosophizing "in the proper order" we do not distinguish mind from body.

As a purely phenomenological description, Descartes' account of how one ordinarily regards oneself rings true. When going about one's daily life, one does not have the sense of being a mind (or purely thinking thing) interacting with a body (or purely extended thing). On the contrary, one feels oneself to be a single entity and does not even think to draw a real or essential distinction between one's mind and body. In affirming claim 2), Descartes clearly saw himself as vindicating common sense.

I noted above that Descartes' statement of claim 2) has often been misunderstood. Some commentators have taken it as an affirmation of substance trialism, but the texts in which it appears belie this interpretation. One notable statement of it appears in the Sixth Meditation, in the context of Descartes' famous disanalogy between the mind-body composite and a sailor in a ship. Descartes says that his mind is not merely present in his body, as for example a sailor is present in a ship, but very closely joined to it (*illi arctissime . . . conjunctum*) and, "as it were, mixed together" (*quasi permixtum*) with it such that they compose one thing (*unum quid*) (AT VII:81, CSM II:56). Reading this as

an endorsement of trialism would violate the letter and spirit in which it is being put forth. Descartes purports to be describing the phenomenology of our experience, rather than making a metaphysical claim about the status of the mind-body composite. That the mind and body are united in this way is put forth as one of the "teachings of nature" that are discovered "by means of the sensations of pain, hunger, thirst, and so on," just as my nature also teaches me "that I have a body, and that when I feel pain there is something wrong with the body, and that when I am hungry or thirsty the body needs food and drink. . . ." (AT VII:80–1, CSM II:56) Descartes' point is that he "feels" as if he is one thing. He is not claiming to have a clear and distinct intellectual apprehension of himself as a unity from which conclusions about the status of the mind-body composite can be drawn.

The sailor disanalogy is useful to our purposes because it provides an explanation as to why one naturally regards oneself as a unity. This question seems especially urgent given Descartes' view that mind and body are really distinct. Why would God have created us so that we naturally regard ourselves as something we are not? In the context of his discussion of the teachings of nature, Descartes explains that the purpose of the senses is simply to inform the mind of what is harmful or beneficial to the composite of which it is a part (AT VII:83, CSM II:57).[11] In other words, the purpose of the senses is to preserve the mind's causal relation with the body, which ultimately amounts to preserving the well being of the latter. One will be more inclined to do this if one regards the mind and body as a single thing than if, as on Descartes' strict metaphysics, one identifies the self with the mind alone and treats the body as something that is ultimately dispensable.

Another misunderstood text, or set of texts, on the question of how one ordinarily regards oneself appears in Descartes' correspondence with Elisabeth. It is here, in two famous letters, that he introduces the much-discussed doctrine of "primitive notions." As we shall see, one of these notions encapsulates both the claim that mind-body interaction is familiar from everyday sense experience and the claim that one ordinarily regards oneself as a single thing. Descartes' remarks in these letters are intended to address the notorious problem of mind-body interactionism, which some commentators have regarded as one of the "scandals" of his philosophy.[12] Elisabeth's statement of the problem is less hyperbolic and more narrowly focused. She presses him to

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11   Also see *Principles* II, 3; AT VIIIA:41–2, CSM I:224.

12   See Kenny, Anthony. "The Cartesian Circle and the Eternal Truths," *Journal of Philosophy* 67 (1968), pp. 685–700. (reprinted by St. Augustine's press, 2009) and Williams, Bernard. *Descartes: the Project of Pure Inquiry*. New York: Penguin Books 1978, p. 287. For a more

explain how it is possible for the mind, as a purely immaterial thing, to produce causal effects on one's body and thus bring about voluntary motion. She finds such interaction unintelligible on the mechanistic principles that Descartes accepts: it is easy to understand how one body can produce motion in another body through physical contact but not how the mind can do so in one's own body since the mind lacks spatial dimension (6 May 1643, AT III:661).

In his first letter, Descartes responds to Elisabeth's objection by introducing four (kinds of) primitive notions that he claims are the "patterns" by which we form all of our other ways of cognizing things.

> First, there are the most general—those of being, number duration, etc.—, which apply to everything we can conceive. Then, as regards body in particular, we have only the notion of extension, which entails the notions of shape and motion; and as regards the soul on its own, we have only the notion of thought, which includes the perceptions of the intellect and the inclinations of the will. Lastly, as regards the soul and body together, we have only the notion of their union, on which depends our notion of the soul's power to move the body, and the body's power to act on the soul and cause its sensations and passions. (21 May 1643, AT III:665; CSM III:218)

The key to Descartes' reply to Elizabeth is this fourth primitive notion of mind-body union. His point is that each notion is different in kind from the other notions and has its own domain of application. In the continuation of this passage, he goes on to say "we go wrong if we try to explain one of these notions by another, for since they are primitive notions, each of them can be understood only through itself."[13] Descartes tells Elisabeth that she has made just such a mistake; she has tried "to conceive the way in which the soul moves the body by conceiving the way in which one body is moved by another." In effect, she has attempted to grasp mind-body interaction by using the primitive notion of body, rather than the notion of union. This is akin to trying to conceive the soul using the imagination (AT III:666, CSM III:218).

Descartes' remarks here about the notion of mind-body union are provocative, but fall short of being as fully clear and explicit as Elisabeth, or we as

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sympathetic view of Descartes' account, see Richardson, "The 'Scandal' of Cartesian Interactionism."

13   Later in the letter he adds that the soul "does not always sufficiently distinguish them from each other, or assign them to the objects to which they ought to be assigned" (AT III:666–7, CSM III:219).

readers, would like. Fortunately, he is more forthcoming in his second letter to her. Before turning to that, however, I would like to make a brief comment about the term "notion" (*notion*) as used in both letters, which were written in 1643 between the publication of the *Meditations* and the *Principles*. This term is not used in a consistent or systematic way in Descartes' mature writings and is not used often. This is important because I do not think it can be tied to the term "idea," which has a very specific technical meaning for Descartes. Commentators often slip into speaking of primitive notions as "ideas" or "concepts."[14] Some scholars have even suggested that they are *innate* ideas, perhaps in part because of Descartes' remark in this first letter that the soul possesses all of these simple notions "by nature" (AT III:666, CSM III:219).[15] But, as learned in the Sixth Meditation, Descartes uses the term "nature" in this context to refer to everything that God has bestowed on us, not just to our purely intellectual gifts. As we shall see, his second letter to Elisabeth confirms that "notions" are not ideas—innate or otherwise—but something very different.

Unsatisfied with Descartes' initial response, Elisabeth writes another letter to him in which she presses her original objection, adding that "it would be easier to concede matter and extension to the soul than to concede the capacity to move a body and to be moved by it to an immaterial thing" (AT III:685). Descartes opens his second letter of reply by referring now to only three kinds of primitive notions, the first kind (of being, number, duration, etc.) having dropped out. He concedes that he should have explained the differences between the "the notions we have of the soul, of body and of the union between the soul and the body" more carefully, and "also how to make each of them familiar and easy to us" (AT III:691, CSM III:226). He promises to do just that. I take what he says next to be his most substantive and authoritative remark about the nature of primitive notions. It is also the one most relevant to our purposes.

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14 This tendency is quite common, but Broughton and Mattern "Reinterpreting Descartes;" Radner, "Descartes's Notion of the Union of Mind and Body" and Schmaltz, "Descartes and Malebranche on Mind and Mind-Body Union," are representative.

15 See, e.g., Broughton and Mattern, who worry about this claim ("Reinterpreting Descartes," 26, note 16) and Garber, "Understanding Interaction." Another tendency on the part of commentators is to read primitive notions as attributes. See Broughton and Mattern, "Reinterpreting Descartes," and especially Schmaltz, "Descartes and Malebranche on Mind and Mind-Body Union." Schmaltz claims that the union constitutes a third principal attribute in Descartes' technical sense (see *Principles* I, 53). My discussion in what follows shows why this proposal is mistaken.

I observe one great difference between these three kinds of [primitive] notions. The soul is conceived only by the pure intellect; body . . . can likewise be known by the intellect alone, but much better by the intellect aided by the imagination; and finally what belongs to the union of the soul and the body is known only obscurely by the intellect or even by the intellect aided by the imagination, but it is *known very clearly by the senses*. That is why people who never philosophize and use only their senses have no doubt that the soul moves the body and that the body acts on the soul. *They regard [considerent] both of them as a single thing, that is to say, they conceive their union; because to conceive the union between two things is to conceive them as one single thing.* . . . it is the ordinary course of life and conversation, and abstention from meditation and from the study of things which exercise the imagination, that teaches us how to conceive the union of the soul and the body (28 June 1643, AT III:691–2; CSM III:227; emphasis added).

This passage reveals something very important about the nature of primitive notions that has not been appreciated in the secondary literature. These are not ideas or concepts but *forms of cognition*.[16] Descartes is claiming that there are different forms of cognition for different intentional objects and that cognizing these objects even involves distinct mental faculties: whereas the soul is properly conceived only by the pure intellect, and the body by the intellect aided by the imagination, the union of mind and body can only be sensed or felt.[17] It is through "the ordinary course of life and conversation" that we are

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16   There is some indication of this point in the first letter, when Descartes says that trying to understand mind-body interaction through the notion of body would be like trying to understand the soul using the imagination (AT III:666, CSM III:218).

17   One is reminded of Malebranche's four ways of knowing from the *Search After Truth*. Malebranche maintains that there are different forms of cognition for different objects. We know God by a "direct and immediate perception," the essence of body through ideas, the existence of the mind and its modifications through consciousness or inner sensation (*sentiment intérieur*), and the existence of other minds through conjecture. N. Malebranche, *The Search After Truth*, Lennon, Thomas M. and Olscamp, Paul J. (trans.). Columbus: Ohio State University Press, 1980, p. 236ff.; hereafter abbreviated as LO. *Oeuvres Complètes de Malebranche*, ed. André Robinet, 20 vols, 2nd ed. Paris: J. Vrin, 1972–84, vol. I, p. 448ff.; hereafter abbreviated as OC. Malebranche uses the informal sense of "know" in French (*connaître* as opposed to *savoir*), which would explain why conjecture is included as a form of knowing; he also employs the broader term "perceive" (*voir*) in this context.

able to cognize this *union*.[18] For our purposes, the most important feature of this discussion is Descartes' description of the third primitive notion, of mind-body union. Notice that in characterizing this form of cognition he reaffirms both of the claims (1) and (2) that we discussed above. However, he does not carefully distinguish them in the way that we have. In fact, later in this letter, he speaks again of "the union which everyone invariably experiences in himself without philosophizing. Everyone feels that he is a single person with both body and thought so related by nature that thought can move the body and feel the things which happen to it" (AT VI:694, CSM III:228). The reason he runs them together is that they are constitutive of this third form of cognition: the interaction of mind and body is something that we perceive in everyday sense experience *and*, when we do so, we regard mind and body as one thing.

This last point resolves a long-standing puzzle with these passages. In the letter to Arnauld discussed above, Descartes says explicitly that we cognize the *interaction* of mind and body through the senses or everyday experience. But in the two passages just quoted he says that we experience the *union* in this way. So does Descartes hold that the union and the interaction of mind and body are different things, and that each is cognized through the senses? Or, is he simply using the term "union" to refer to mind-body interaction? The answer best supported by this second letter to Elisabeth is clearly the latter. After all, it is mind-body interaction that she is asking him to explain and which he himself is clearly addressing ("people who never philosophize and use only their senses have no doubt that the soul moves the body and that the body acts on the soul"). I submit that Descartes refers to mind-body interaction as a "union" for the simple reason that when experiencing this interaction we ordinarily regard mind and body as a single, unified thing. This point might seem trivial if it weren't for the fact that some commentators have read Descartes as desperately reaching for a separate notion of mind-body union in this passage in order to explain mind-body interactionism.[19] But that interpretation stretches

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18   One virtue of this interpretation of primitive notions is that it explains the sense in which they are primitive and how the notion of mind-body union is independent from the other two notions. Some commentators have found this to be an "especially troublesome" difficulty for Descartes (Broughton and Mattern, "Reinterpreting Descartes," 26–7; cf. Radner, "Descartes's Notion of the Union of Mind and Body.") If instead of being ideas, notions are distinct forms of cognition, involving different faculties, then the answer is simple, straightforward, and unproblematic.

19   See Beck, John L. *The Metaphysics of Descartes*. Oxford: Clarendon Press, 1965, p. 270 and Radner, Daisie. "Descartes's Notion of the Union of Mind and Body," *Journal of the History of Philosophy* 9 (1971), pp. 159–70; and "Rejoinder to Professors Loeb and Richardson." *Journal of the History of Philosophy*, 23 (1985), pp. 232–36.

the text far beyond what Descartes actually says. It also attributes a view to him that is incoherent: if the mind-body union were a single substance, then there would be no interaction between mind and body. So how could an appeal to the former possibly explain the latter?[20]

Leaving aside the trialist interpretation, it is reasonable to ask how Descartes' appeal to the doctrine of primitive notions is intended to respond to Elisabeth's objection. Our main task in this section is of course not to understand Descartes' response to the problem of mind-body interactionism, but to analyze and grasp the implications of his claim that one ordinarily regards oneself as a union. However, these two issues are related and coming to grips with the former will shed further light on the latter. Elisabeth is asking him to make mind-body interaction intelligible and many readers assume that he aims to satisfy her request, even if in their opinion he does not succeed. But, in fact, I think he intends to be doing something quite different. Rather than explaining how mind-body interaction is possible or intelligible, Descartes sees himself as trying to accomplish two other goals:

a)   To convince Elisabeth that interaction occurs.
b)   To explain why mind-body interaction cannot be made intelligible, despite her hopes to the contrary.

With respect to a), it is sometimes suggested that this part of Descartes' reply misses the point. Elisabeth wasn't asking whether interaction occurs, but was instead raising doubts about whether it is intelligible. There is, however, a way of understanding Descartes' reply that makes his point relevant. Given her doubts about the intelligibility of mind-body interaction it would be natural for her to infer that interaction is impossible, assuming the intuitive principle "if x is inconceivable then x is impossible." One should read Descartes as attempting to show that this inference is unsound, not by establishing that interaction is conceivable after all but by appealing to everyday experience to demonstrate that interaction occurs, which shows that it is possible even if we cannot conceive it. As for b), the main point of Descartes' doctrine of primitive notions is that mind-body interaction does not fall within the purview of the intellect and thus cannot be made intelligible in the way that the mind and body each can be. We can know the mind through the intellect alone and although the imagination serves as a useful aid to the cognition of body, we

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20   I suspect that some commentators have been attracted to this view because of the assumption that primitive notions denote clear and distinct (innate) ideas. So, when Descartes says there is a primitive notion of union, they conclude that there must some genuine unity in the world that conforms to that idea.

can ultimately know it through the intellect as well. By contrast, the interaction of mind and body can only be perceived through our sense faculty (which of course is not a source of knowledge for Descartes), and even then we are confusedly regarding mind and body as one thing! Rather than trying to satisfy Elisabeth's request to make mind-body interaction intelligible, Descartes instead explains *why* it is not intelligible and why it cannot be made so. Human understanding has limits even for a rationalist.

In the passages that we examined in the first part of this section, Descartes suggests that regarding oneself as a single thing is a habit acquired in earliest childhood, in a pre-reflective state. A reader might be tempted to think that one jettisons this habit after completing one's meditations on first philosophy—in particular, after proving the real distinction between mind and body. But this is not Descartes' view, as the second letter to Elisabeth makes clear. If anything, being immersed in the senses and regarding the mind and body as a single thing is one's natural state. One way of characterizing the problem that Elisabeth is having, from Descartes' point of view, is that she has become too good at meditating—so good in fact that she has developed the habit of trying to conceive everything in intellectual terms. This is why he enjoins her in the subsequent paragraph to follow this "chief rule," to which he himself claims to adhere: "never spend more than a few hours a day in thoughts which occupy the imagination and a few hours a year on those which occupy the intellect alone. I have given all the rest of my time to the relaxation of the senses and the repose of the mind" (AT III: 692–3, CSM III:227). Later in the letter he adds that it is necessary to have understood the principles of metaphysics "once in a lifetime," but "that it would be very harmful to occupy one's intellect frequently in meditating upon them, since this would impede it from devoting itself to the functions of the imagination and senses" (AT III:695, CSM III:228). Descartes' point, I take it, is not just that such a course of action will enable Elisabeth to experience the interaction of mind and body for herself but also that the preservation of this mind-body relation depends on attending regularly to the deliverances of our senses, which one ignores at one's peril.

Since regarding oneself as a single thing or union is one's natural state, it is easy to slip back into it. What requires careful meditative work is to conceive the real distinction of mind and body. This is why he tells Regius that

> . . . many more people make the mistake of thinking that the soul is not really distinct from the body than make the mistake of admitting their distinction and denying their substantial union, and in order to refute those who believe souls to be mortal it is more important to teach the distinctness of parts in a human being than to teach their union (AT III:508, CSM III:209).

This statement explains why Descartes emphasizes the real distinction in his published writings to the relative neglect of the notion of mind-body union (read: interaction). But again, unlike in most people, in Elizabeth the tendency to regard oneself as a unity has been reversed:

> I think it was those meditations rather than thoughts requiring less attention that have made Your Highness find obscurity in the notion we have of the union of the mind and the body. It does not seem to me that the human mind is capable of forming a very distinct conception of both the distinction between the soul and the body and their union; for to do this it is necessary to conceive them as a single thing and at the same time to conceive them as two things; and this is absurd (AT III:693; CSM III:227).[21]

To help Elisabeth make the gestalt switch, he encourages her to regard the soul as corporeal, which, as one will recall from her second letter, she claimed was easier than conceiving the interaction of mind and body (AT III:685). Descartes says that she should "feel free to attribute this matter and extension to the soul because that is simply to conceive it as united to the body" (AT III:694, CSM III:228). To conceive the mind as corporeal is in effect to regard mind and body as one thing, which, as we have seen, Descartes takes to be necessary for experiencing their interaction. Once one gains a certain level of proficiency, one can tack back and forth fairly easily between conceiving the real distinction between mind and body and perceiving their interaction, but because the latter involves regarding them as a single thing, one cannot do this at the same time.

There are a few general conclusions that I wish to draw from this discussion, some of which will serve us in the next section. The first and most important conclusion is that Descartes' statement that one ordinarily regards oneself as a single thing is, like his assertion that we perceive the interaction of mind and

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21   Wilson reads Descartes as admitting here that his position on the mind-body relation is self-contradictory. According to her, he is saying that mind and body are two things and not two things (*Descartes*, p. 207 and p. 217). This reading seems uncharitable on its face, but it is also instructive. Commentators have a tendency to think that Descartes is offering a second theory of mind-body union, over and above their interaction, when he says that we regard them as one thing. Once one appreciates that he is merely making a phenomenological claim about how the ordinary person regards himself, the putative contradiction disappears and our expectations for what he should say, given his official dualism, are vindicated.

body in everyday experience, intended to be a descriptive, phenomenological claim. It is not, as it is sometimes read, a metaphysical statement about the status of the mind-body composite that violates his strict dualism. Commentators such as Margaret Wilson have argued that Descartes clumsily offers two inconsistent theories of the human being: one in which the relation between mind and body is exhausted by their causal interaction and another in which mind and body are coextensive and constitute a third thing.[22] But in the passages we have examined, it is clear that while sometimes affirming the first theory, Descartes never defends anything like the second. He does not say that mind and body *are* one thing, only that we regard them as such. In the Sixth Replies and in the second letter to Elisabeth, Descartes could not be clearer about this point. Second, and relatedly, Descartes uses the term "union" to refer to the interaction of mind and body, and he does so because of the fact that one regards oneself as a unity when perceiving this interaction in everyday life. This usage strongly suggests that the so-called "union" of mind and body is nothing more than this interaction. Third, and this reinforces the first two points, Descartes' three primitive notions designate different forms of cognition involving distinct mental faculties, rather than distinct ideas or concepts. This is important because the faculty involved in perceiving the union (read: interaction) of mind and body is sensory and hence confused. The main point of Descartes' doctrine of primitive notions is that a purely intellectual grasp of mind-body interactionism is beyond our ken.

Descartes' response to the problem of mind-body interactionism is important to for us because it provides a precedent for his use of the primitive notion of union to do philosophical work. In the next section, I argue that he uses this same notion to accommodate the traditional hylomorphic account of the human being within his own system, without being disingenuous. Given Descartes' strict dualism, the accommodation in question is far from being perfect, but for his purposes it suffices to satisfy appearances.

3   The Conceptualist Account of Descartes' Human Being

Critics of the trialist interpretation often point out that in official statements of his metaphysics, Descartes affirms strict dualism. For example, in a rich but highly compressed portion of the *Principles of Philosophy* devoted to laying out his metaphysics in a systematic manner, he writes: "I recognize only two ultimate classes of things: first, intellectual or thinking things, i.e. those which

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22   Wilson, *Descartes*, 207–220. Also see note 21.

pertain to the mind or thinking substance; and secondly, material things, i.e. those which pertain to extended substance or body" (AT VIIIA:23, CSM I:208). This passage and others like it provide compelling evidence that Descartes is a committed dualist. Nevertheless, it is fair to ask what exactly he sees himself as trying to accomplish in those other passages—which champions of the trialist interpretation often cite—where he seems to treat the human being as an *ens per se* and/or to endorse the Scholastic hylomorphic account of the mind-body union, according to which the soul is the substantial form of the body. These two sets of passages need to be reconciled with each other. The task of the present section is to do just that by offering fresh interpretations of the latter set of passages, which include most notably the Fourth Replies and one of two letters to Regius. As we shall see, Descartes never endorses the Scholastic account of the human being. He says only that one can *regard* the mind-body composite as a substance, in keeping with his account of how one ordinarily regards oneself when not doing philosophy. A proper understanding of these texts confirms that for Descartes the mind-body composite is a union merely in a conceptual sense.

As a prologue to this discussion, more needs to be said about the expression "regarding as" or "considering as," which we have already encountered in the previous section, and the related locution "what we call." All three expressions figure prominently in the passages on union that we shall discuss below. The "regarding as" locution appears in a variety of contexts throughout the corpus. Descartes often speaks of how we can, do, or ought to "regard" or "consider" something, implying that the very same thing can be considered in different ways. But for any given idea, there is typically only one, unique way of regarding it that is clear and distinct. For example, in *Principles of Philosophy* Descartes says that pain and color sensations are "clearly and distinctly perceived when they are *regarded* [*spectantur*] merely as sensations or thoughts" (I, 68; AT VIIIA:33; CSM I:217; emphasis added).[23] But, he goes on to say, when these sensations are "judged to be real things existing outside our mind, there is no way of understanding what sort of things they are" (ibid.). In other words, sensations are clear and distinct if and only if we regard them as modes of mind and refrain from regarding them as representations or resemblances of objects outside our thought.

A similar distinction between different ways of regarding is made in the context of Descartes' treatment of space. As a plenum theorist, Descartes holds that there is no real difference between space (or extension) and corporeal

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23   Incidentally, Descartes affirms here that sensations are modes of mind rather than modes of the union as some trialists contend.

substance (*Principles* II, 11; AT VIIIA:46; CSM 1:227). The only difference lies "in our way of conceiving them" (*in modo, quo concipitur*). However, he also maintains that, as a result of a prejudice formed in childhood, most of us take them to be distinct. Here is his account of how this prejudice is formed. If we take some particular corporeal substance, such as a stone, we can regard [*spectamus*] the extension of the stone as something particular and inseparable from it. When we do that, there is no danger of reifying space and treating it as something distinct from bodies. But we can also consider [*consideratur*] the extension of the stone generically, such that any body can come to "occupy" it (*Principles* II, 12; AT VIIIA:46–47; CSM 1:228). Doing so lands us in confusion, for now we are reifying space, treating it as something distinct from the stone. As in the previous case, there are two ways of regarding the object in question, only one of which is clear and distinct. The general point that I wish to draw from these disparate examples is that Descartes typically uses the term "regard" in contexts where he is trying to distinguish a confused way of thinking from a clear and distinct consideration. This means that in most cases a confused way of regarding can be improved upon or made clear and distinct.

In addition to the "regarding as" locution, Descartes sometimes speaks of what "we call" something, occasionally in the very same context. This expression is sometimes used to indicate that the term that follows is being used loosely, as a *façon de parler*. For example, in his polemic against the possibility of a vacuum in the *Principles*, he notes that the term "empty" often refers *not* to a space that is devoid of body but simply to a place in which there is none of the bodies that we think ought to be there. For example, we might "call" [*dicitur*] a pitcher empty if instead of containing water it were full of air. But, he adds, "if we subsequently fail to keep in mind what ought to be understood by the terms 'empty' and 'nothing,' we may suppose that *a space we call* [*dicimus*] *empty* contains not just nothing perceivable by the senses but nothing whatsoever" (II, 17; AT VIIIA:49; CSM 1:230; emphasis added). In another use of this expression, Descartes says that "although experience shows us very clearly that the bodies we call 'heavy' descend towards the center of the earth, we do not for all that have any knowledge of the nature of *what is called* [*nomme*] '*gravity*,' that is to say, the cause or principle which makes bodies descend in this way" (AT IXB:8; CSM 1:182–3). Here the expression "what is called …" indicates that the term "gravity" serves as a placeholder for whatever mechanical principle is causally responsible for the phenomenon of falling bodies. As it is commonly understood, gravity involves action at a distance. But on the new mechanistic science of which Descartes is a proponent, such occult action is rejected. So what we ordinarily "call" gravity admits of a fully mechanical reduction and explanation. Descartes thinks that we can continue to speak

with the vulgar but uses the expression "what we call" so that we are not misled by such vulgarisms.[24]

Both the "regarding as" and the "what is called" locutions are almost universally ignored in the secondary literature, as far as I can tell. This is unfortunate because in the passages in which they occur they provide an important clue as to how we should interpret Descartes' remarks. Often when using these expressions he is not speaking in his own voice, but is referring to the point of view of the confused person. With this discussion as background, let us now turn to some of the other key passages on mind-body union where these expressions figure prominently, beginning with the Fourth Replies.

In this text, Descartes is concerned to explain the notion of "completeness" or of a "complete thing," which is key to his proof of real distinction between mind and body. He thinks he can prove that mind and body are really distinct simply by establishing, first, that each one is a complete thing and, second, that each can be understood apart from the other. But this raises the question of what is meant by a complete thing, something that he thinks Arnauld has failed to appreciate. As it turns out, a complete thing just is a substance or, as he tells Arnauld, "a substance endowed with the forms or attributes which enable me to recognize that it is a substance" (AT VII:222, CSM II:156). Shortly thereafter he writes:

> I am aware that certain substances are commonly *called* [*vulgo vocari*] "incomplete". But if the reason for calling them incomplete is that they are unable to exist on their own, then I confess I find it self-contradictory that they should be substances, that is, things which subsist on their own [*res per se subsistentes*], and at the same time incomplete, that is, not possessing the power to subsist on their own. It is also possible to *call* [*dici*] a substance incomplete in the sense that, although it has nothing incomplete about it qua substance, it is incomplete in so far as it is *referred* [*referuntur*] to some other substance in conjunction with which it forms something which is a unity in its own right.

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24   For further discussion and examples of the locution "what is called…," see my essay, "Descartes on 'What We Call Color'," in *Primary and Secondary Qualities: the Historical and Ongoing Debate*, Lawrence Nolan (ed.). Oxford: Oxford University Press, 2011, pp. 82–108, where I argue that Descartes often uses the expression "what we call 'color'" to refer to the mechanical properties of bodies that cause our visual sensations. Not knowing what these properties are, absent any scientific training, the ordinary person names them on the basis of her sensations. Thus, the term "color" serves as a placeholder for this unknown cause. Descartes speaks of "what we call…" so that we are not seduced by this color-naming practice into mistakenly judging that colors are qualities existing in the world.

> Thus a hand is an incomplete substance when it is *referred* to the whole body of which it is a part; but it is a complete substance when it is *considered* [*spectatur*] on its own. And in just the same way the mind and the body are incomplete substances when they are *referred* to a human being which together they make up. But if they are *considered* on their own, they are complete (AT VII:222, CSM II:156–7; emphasis added).

Descartes begins here in the first two sentences by stressing the symmetry between his understanding of "completeness" and the notion of substance as a thing that exists independently. He sometimes defines "substance" in other ways, but in the context of proving real distinction he stresses the notion of independent existence. Thus, if a thing is "incomplete" in the sense that it does not exist independently then it cannot be a substance, on pain of contradiction. This statement is essential for interpreting the rest of the passage. Having introduced and stressed this strict notion of completeness, Descartes is then prepared to allow that we might nevertheless *call* a substance "incomplete" in some looser sense, or *call* something "complete" that is not a substance. What is important to note is that everything that Descartes says after explaining the strict notion of completeness is couched in the conceptual and linguistic modes of discourse: something that is strictly speaking a complete thing, might be *called* incomplete depending on how we *consider* it.

Some advocates of Cartesian trialism have seized upon this passage because Descartes seems to imply that the human being is a complete thing or substance. Of course he also says that mind and body are complete when considered on their own, which might seem to suggest that the human being is incomplete. So which is it? Paul Hoffman has argued that Descartes "relativizes" the notion of completeness in this passage: "mind and body are incomplete substances when referred to the human being which they compose but considered alone they are complete." He also takes Descartes' claim that mind and body are incomplete when referred to the human being to entail that the human being is a substance or *ens per se* (1999, 256). But it seems implausible to suppose that Descartes could relativize so fundamental a notion as completeness, especially since it figures so prominently in his proof of real distinction.[25] Either something is a complete thing (or substance) or it is not. Fortunately,

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25 In response to this problem, Hoffman argues that Descartes is committed to a weak notion of substance (and to two different notions of substance, according to which the mind is a substance in a different sense than the union) (see his "Cartesian Composites," *Journal of the History of Philosophy* 37 (1999), pp. 251–70, p. 257; also see his 1986 and his "Descartes's Theory of Distinction," *Philosophy and Phenomenological Research*, 64 (2002), pp. 57–78. But I find this claim to be implausible and ad hoc.

there is a more plausible reading of the claim that the human being is a complete thing, along the lines I have already suggested. Given the repeated references to what we *call* something, what we conceptually *refer* something to, and to how something is *considered*, this passage begs for a conceptualist reading. Descartes thinks that in proving real distinction he has already established that mind and body are complete things. So when he says that mind and body are "*incomplete substances* when they are referred to a human being..." he should not be taken to mean that mind and body are really incomplete, nor that the human being is complete in any metaphysical sense. His point is that we can *regard* the human composite as a complete thing and that doing so involves regarding mind and body as incomplete. But this way of regarding the mind-body composite has no ontological implications. So, contrary to Hoffman, Descartes employs a conceptualizing strategy that is consistent with his dualism, rather than a relativizing strategy that abrogates it.

The aim of Descartes' conceptualizing strategy becomes clear if one appreciates the context of his remarks. Arnauld had objected that the proof of real distinction in the Sixth Meditation "proves too much" by reverting to the Platonic view that "man is merely a rational soul and the body merely a vehicle for the soul" (AT VII:203, CSM II:143). Now, there are a couple of ways in which Descartes might have distanced himself from Plato on this issue. For one thing, he could have drawn attention to the distinctive sensory effects that result from the mind's interaction with the body. As we have seen, he invokes these effects in the Sixth Meditation in the context of his discussion of the "close and intimate union" between mind and body. And in a letter to Regius, in which he refers back to this discussion, he notes that one can explain what the mind-body "union" consists in by saying that

> ... we perceive that sensations such as pain are not pure thoughts of a mind distinct from a body, but confused perceptions of a mind really united to a body. For if an angel were in a human body, he would not have sensations as we do, but would simply perceive the motions which are caused by external objects, and in this way would differ from a real man ... (January 1642, AT III:493; CSM III:206)

In the Fourth Replies, Descartes could have told Arnauld that the Platonic conception of the human soul is the conception of an angel (without the religious overtones of course), but that he envisages a more intimate relation between soul and body in the manner just described. However, that is not what Descartes does say, perhaps in part because he had already given an explanation like that in the Sixth Meditation that apparently left Arnauld unsatisfied,

and rightly so.[26] Descartes' view is closer to Plato's than he would like to admit. He also knew that what Arnauld was really asking is how his view could be reconciled with the traditional Scholastic conception of the mind-body union as an *ens per se*. The aim of his conceptualizing strategy, then, is to show how he can speak with the Scholastics on this issue, without being disingenuous, even if at bottom his own view is very different from theirs. His doctrine that one ordinarily regards oneself as a single thing provides him with a resource for doing so.

Descartes' replies to Arnauld are extremely important for interpreting some of his other remarks to Regius, written only a few months later, in two oft-cited letters on the question of whether the human being is an *ens per se*.[27] Regius had offended his Aristotelian colleagues at the University of Utrecht by proclaiming in Descartes' voice and his own that the human being is *ens per accidens*. This assertion so incensed Voetius and his supporters that they attacked Regius' views in public disputation. Descartes coaches Regius on how to respond both before and after this disputation, so as to quell the controversy and to win political points against Voetius. Descartes instructs Regius in both letters to assert that the human being is an *ens per se* or genuine unity. Should we take this as evidence that he is committed to such a view himself? If so, then he would also be committed to holding that the union is a substance, for as the passage from the Fourth Replies indicates, and as the scholastics themselves held, "substance," "complete thing," and *ens per se* are co-extensive terms. In the passage cited above, for example, Descartes says that something is incomplete if it lacks the power to subsist *per se*. A complete thing or substance, then, is something that can exist *per se*, i.e. it is an *ens per se*. Some commentators have

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26   It is sometimes noted that the relation between mind and body on Descartes' view is still
      only contingent or accidental, rather than necessary or essential. See e.g. Cottingham,
      "The Mind-Body Relation," p. 184.

27   Hoffman ("Cartesian Composites" p. 256) and Schmaltz ("Descartes and Malebranche on
      Mind and Mind-Body Union," p. 289) both cite the temporal proximity of these two texts
      as evidence that we should treat Descartes' remarks to Regius with the same respect and
      authority as we ascribe to the Fourth Replies, as part of his published writings. This point
      is intended to counter those commentators who read Descartes as dissimulating in his
      remarks to Regius, for reasons discussed below. While I don't concur that these letters
      command the same authority as the Fourth Replies, I do agree that we can interpret these
      letters in light of what he says in the Fourth Replies and that his view is consistent in both
      sets of writings. However, as we have already seen, my interpretation is very different
      from theirs.

read the letters to Regius in this way.[28] But others have argued that Descartes is merely deploying a calculated political strategy.[29] The latter are certainly closer to the truth, but I do not think Descartes' remarks in these letters present such a stark choice, if we keep in mind his earlier remarks in the Fourth Replies, and the special linguistic and conceptual contexts in which they are framed. As in that earlier context, Descartes qualifies his remarks to Regius by referring to how the mind-body composite is being "considered" when we "say" that it is an *ens per se* or an *ens per accidens*. In one of the most notable passages in the second letter, he writes:

> When we *said* that a human being is an *ens per accidens*, we meant this only in relation to its parts, the soul and the body; we meant that for each of these parts it is in a manner accidental for it to be joined to the other, because each can subsist apart, and what can be present or absent without the subject ceasing to exist is called an accident. But if a human being is *considered* in himself as a whole, we *say* of course that it is a single *ens per se*, and not *per accidens*; because the union which joins a human body and soul to each other is not accidental to a human being, but essential, since a human being without it is not a human being (AT III:508, CSM III:209; emphasis added).

Descartes is best read here as speaking exclusively in the conceptual and linguistic modes of discourse. Of course, the phrase "we said" in the first line is referring to Regius' initial proclamation that the human being is an *ens per accidens*, but it is telling that Descartes continues to use this form of expression later in the passage. He also uses the conceptual expression "considered," noting that we can consider the human being as an *ens per se*. As in the passage to Arnauld, he is best read as appealing to his account of how the ordinary person regards herself, when not engaged in philosophy, as a strategy for accommodating the Scholastic conception of the human being within his own. The conceptual and linguistic modes of discourse allow him to say things that will sound pleasing to his Scholastic reader without compromising his dualism. As in the passage from the Fourth Replies, he never asserts that we can clearly and distinctly perceive the human being as a substance or *ens per se*. So it would be incorrect to draw any metaphysical theses from his remarks.

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28   See, e.g., Grene, *Descartes among the Scholastics*, and Hoffman, "The Unity of Descartes's Man."

29   See, most notably, Chappell, "L'homme cartésian," and M. Rozemond, *Descartes's Dualism*.

Incidentally, Schmaltz[30] takes the last few lines of this passage as evidence that the human being is a substance and that union constitutes the essence or principal attribute of that substance. Descartes says "the union which joins a human body and soul to each other is . . . essential, since a human being without it is not a human being."[31] But this remark admits of more neutral reading in keeping with what we have already observed about Descartes' political strategy. Note that in the larger sentence in which this phrase appears, he begins by saying "if a human being is *considered* in himself as a whole, we *say* of course that it is a single *ens per se*. . . ." So what he says in the latter part of the sentence is within the scope of this special context. If one is already considering the human being as a union, then of course that union is "essential" to it considered as such. That's tautological. But that does not imply that the human being really has an essence or principal attribute. Descartes is not even addressing that metaphysical question. His remarks are confined to what we *say* and how we ordinarily *consider* the human composite.

So far, we have examined passages where it is alleged by trialists that Descartes explicitly claims, or at least implies, that the mind-body union is a complete thing or *ens per se*. But there are other passages in which Descartes purportedly claims that the soul is a quality, mode, or accident of the body. If this reading were correct, it might be thought to provide indirect evidence for Cartesian trialism. One potential obstacle to trialism is the principle that one substance cannot be a quality of another substance, which some commentators have attributed to Descartes.[32] But if Descartes were committed to the claim that the soul is a quality of body or, in other words, something that inheres in body, this obstacle would be removed. However, I shall argue that such passages, like the others we have already considered, are best read along conceptualist lines. Consider first the following passage from the Sixth Replies.

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30   Schmaltz has told me in conversation that he no longer advocates Cartesian trialism.

31   "Descartes' claim that the union constitutes the essence of a complete substance entails the view that this union is (to borrow from the *Principles*) a principal attribute of that substance" (T. Schmaltz, "Descartes and Malebranche on Mind and Mind-Body Union," p. 289). See note 14.

32   See e.g., Gouhier, *La pensée métaphysique de Descartes*, p. 353. Hoffman ("The Unity of Descartes's Man" pp. 352–3) denies that Descartes is committed to this principle. Also see Voss, "Descartes: the End of Anthropology," p. 296 and Grene, *Descartes among the Scholastics*, pp. 36–40.

> I conceived of gravity [*gravitatem*, literally "heaviness"] as if it were some
> sort of real quality, which inhered in solid bodies; and although I *called* it
> a "quality", thereby referring it to the bodies in which it inhered, by add-
> ing that it was "real" I was in fact thinking that it was a substance. In the
> same way, clothing, *regarded* in itself, is a substance, even though when
> *referred* to the man who wears it, it is a quality. Or again, the mind, even
> though it is in fact a substance, can nonetheless *be said* to be a quality of
> the body to which it is joined (AT VII:441–2, CSM II:297–8; emphasis
> added).

Much has been made in the secondary literature on mind-body union of
Descartes' analogy with gravity or heaviness.[33] I do not have sufficient space
to discuss that here. Instead, I shall focus on the linguistic and conceptual lan-
guage in this passage. Notice that Descartes never says in his own voice that the
mind is a quality of body. Rather he says that the mind, although it is strictly
speaking a substance, might *be said* to be a quality of the body to which it
is joined, just as gravity might *called* a quality of bodies or clothing might be
regarded as a quality of the person who wears it. So the mind is not really a
quality of body. We might just call it or regard it as one. In drawing these analo-
gies, Descartes takes himself to be describing the point of view of the con-
fused person, as both the context and the conceptual and linguistic modes of
discourse make clear. With respect to the context, Descartes is responding to
lingering doubts on the part of the Sixth Set of Objectors to the real distinc-
tion between mind and body. He locates the source of these doubts, which he
concedes he once experienced himself, in prejudices formed in our infancy. As
a result of these prejudices, he says the mind "took thought and extension to
be one and the same thing, and referred to the body all notions which it had
concerning things related to the intellect" (AT VII:441, CSM II:297). So, from
Descartes' perspective, the reason that the Sixth Set of Objectors are experi-
encing doubts about real distinction is that they are still mired in the preju-
dices of childhood, most notably the tendency to conflate mind and body. It
is important to note that the passage we are considering appears just a few
pages before the one cited at the beginning of section 2, where Descartes says
that beginning in early childhood one confusedly regards one's mind and body
as a unity. This remark is part of the same context. So, again, when Descartes
asserts in the passage in question that the soul might be *said* to be a quality of

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33   See e.g. Garber, "Understanding Interaction;" Hoffman, "The Unity of Descartes's Man,"
      pp. 354–6; Broughton and Mattern, "Reinterpreting Descartes," p. 215; Richardson, "The
      'Scandal' of Cartesian Interactionism," pp. 5–8; and Wilson, *Descartes*, 1978, 213–15.

the body, he is describing the state of mind of the ordinary person who habitually regards herself as a unity whenever she is not engaged in philosophy.

A similar passage in the *Notae* should be read along the same lines. The *Notae* is Descartes' response to a broadsheet authored by Regius in which he claims to set forth faithfully various Cartesian doctrines, but in fact often distorts them. In the second article of his broadsheet, Regius asserts that the mind could be a substance *or* a mode of a corporeal substance. Of course, this assertion constitutes a rejection of strict dualism. Thus, Descartes responds as follows:

> Lastly, we should note that in subjects which are composed of several substances, one such substance often stands out; and we view this substance in such a way that any of the other substances which we associate with it are nothing but modes of it. Thus a man who is dressed can be *regarded as* a compound of a man and clothes. But with respect to the man, his being dressed is merely a mode, although clothes are substances. In the same way, in the case of a man, who is composed of a soul and a body, our author might be *regarding* the body as the principal element, in relation to which having a soul or the possession of thought is nothing but a mode. But it is absurd to infer from this that the soul itself . . . is not a substance distinct from the body (AT VIIIB:351, CSM 1:299).

Here again we find Descartes writing in the conceptual mode of discourse in an effort to accommodate Regius' claim that the soul could be a mode of corporeal substance. Descartes does not agree with that claim but notes that whenever one is dealing with a subject composed of two (or more) substances, one can regard one as primary and the other as a mode of it. The soul-body composite, just like the compound of man and clothes, is such a case. If we arbitrarily choose to privilege the body, we can regard the soul as a mode of it, but it would be "absurd" to conclude on the basis of this way of regarding that the soul is not a substance that is really distinct from the body. Presumably, one could also regard the soul as primary and the body as a mode of it, but it would not follow that the body is not a substance. In either case, one's (confused) ways of regarding mind and body do not change the metaphysical facts and Cartesian dualism is preserved.

4   The Analogy with Geometry

The human being is not the only example in Descartes' philosophy of something which, strictly speaking, is not a substance but which we nevertheless

regard as one. It is an unappreciated fact of the Cartesian system that we also conceive geometrical objects as substances. Indeed, Descartes holds that we ordinarily regard geometrical objects as substances and the theorems that can be demonstrated of them as their "properties," even though, strictly speaking geometrical objects exist nowhere in nature. The relation of geometrical figure to theorem is conceived on the model of the substance-attribute relation. One is first struck by this fact when reading the Fifth Meditation. There, in the context of introducing a theory of "true and immutable natures," Descartes asserts that even if there are no geometrical objects in nature, we can still demonstrate various "properties" of them.

> I find within me countless ideas of things which even though they may not exist anywhere outside me still cannot be called nothing; for although in a sense they can be thought of at will, they are not my invention but have their own true and immutable natures. When, for example, I imagine a triangle, even if perhaps no such figure exists, or has ever existed, anywhere outside my thought, there is still a determinate nature, or essence, or form of the triangle which is immutable and eternal, and not invented by me or dependent on my mind. This is clear from the fact that various properties can be demonstrated of the triangle, for example that its three angles equal two right angles, that its greatest side subtends its greatest angle, and the like; and since these properties are ones which I now clearly recognize whether I want to or not, even if I never thought of them at all when I previously imagined the triangle, it follows that they cannot have been invented by me (AT VII:64; CSM II:44).

It sounds peculiar to speak of geometrical theorems as "properties," but this makes better sense when one considers that Descartes is drawing an analogy, in the context of the ontological argument, between the ideas of geometrical objects and the idea of God. Descartes aims to show that one can demonstrate God's existence by perceiving that existence is contained in the clear and distinct idea of a supremely perfectly being in the same way that one can demonstrate that a triangle has angles equal to two right angles by seeing that this property is contained in our clear and distinct idea of it. But one can also view the analogy from the other direction. Geometrical objects are being treated on the model of substances and the theorems that can be demonstrated of them as essential properties or, to use Descartes' technical vocabulary, attributes that are merely rationally distinct from their objects. To appreciate the full implications of this point, we must turn to Descartes' account of attributes and their relation to substances in the *Principles*. There, Descartes insists that a substance and each of its attributes are distinct merely by reason (*ratione*).

> [A] distinction of reason is a distinction between a substance and some attribute of that substance without which the substance is unintelligible; alternatively, it is a distinction between two such attributes of a single substance. Such a distinction is recognized by our inability to form a clear and distinct idea of the substance if we exclude from it the attribute in question, or, alternatively, by our inability to perceive clearly the idea of one of the two attributes if we separate it from the other. For example, since a substance cannot cease to endure without also ceasing to be, the distinction between the substance and its duration is merely one of reason. (AT VIIIA:30; CSM I:214)

So a substance and any one of its attributes are merely rationally (or conceptually) distinct, as are any two attributes of a single substance. The criterion for a distinction of reason of the first type is that we are unable to form a clear and distinct idea of a substance if we "exclude" the attribute from it in our thought. To understand this point, we must invoke a very important distinction that Descartes draws in a letter to Gibieuf between two types of mental operations—abstraction and exclusion.[34] These two operations "run like a thread" through many of Descartes' major arguments but have not received the attention they deserve.[35]

Like many early modern figures, Descartes conceives abstraction in terms of selective attention; we abstract by selectively attending to one or more of the contents of our idea of something, while ignoring others. To use Descartes' example in the passage just cited, one abstracts from the idea of a substance, such as a table, by attending only to its duration and ignoring its extension, etc. Descartes opposes abstraction to exclusion, which he treats as a more radical intellectual operation. When performing an act of exclusion one is not simply ignoring some feature of an idea but actively denying it. Some exclusions can be performed clearly and distinctly, others cannot. The most important example of clear and distinct exclusion within Descartes' system occurs in the proof of real distinction. In that case, one attends to the clear and distinct ideas of both mind and body and mutually excludes one from the other.

As I have argued elsewhere, rational distinctions are generated in our thought by a process of abstraction, in the sense just explained.[36] So if two things are merely rationally distinct then we can abstract one from the other

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34 See AT III:474–5, CSM III:201–2.

35 The one notable exception is Murdoch, Dugald, "Exclusion and Abstraction in Descartes' Metaphysics," *Philosophical Quarterly*, 1993, 43: 38–57, whom I quote here.

36 See Nolan, Lawrence. "Reductionism and Nominalism in Descartes's Theory of Attributes." *Topoi*. 1997, 16: 129–40; and my "Descartes's Theory of Universals," *Philosophical Studies*

but we cannot mutually exclude them in thought. Now we are prepared to see how geometrical objects and their properties are being conceived on the model of substances and their attributes. Descartes treats them as if they are merely rationally distinct. Consider the following passage from the First Replies.

> [I]f I think of a triangle or a square . . ., then whatever I apprehend as being contained in the idea of a triangle—for example that its three angles are equal to two right angles—I can with truth assert of the triangle. And the same applies to the square with respect to whatever I apprehend as being contained in the idea of a square. For even if I can understand what a triangle is if I *abstract* the fact that its three angles are equal to two right angles, *I cannot deny that this property applies to a triangle by a clear and distinct intellectual operation*—that is, while at the same time understanding what I mean by my denial (AT VII:117–8, CSM II:84; emphasis added).

Descartes says explicitly here that one can abstract the property of having angles equal to two right angles from a triangle, but cannot deny (or exclude) this property by a clear and distinct intellectual operation.

   Now, even though Descartes thinks that we conceive geometrical objects and their properties on the model of substances and attributes, he denies that there are any such objects in nature. In the Fifth Replies, Descartes scoffs at the suggestion that there could be any two dimensional objects in the world, which of course rules out plane geometrical figures, but he also denies that there are any objects with perfectly straight lines, which rules out perfect solids as well.[37] Additional support for this contention can be found in Descartes' theory of universals. The "true triangle", as he calls it in the Fifth Replies, is a universal. But like many seventeenth-century philosophers, Descartes was a conceptualist about the ontological status of universals, mathematical or otherwise. The universe contains only particular beings and, as he says in the *Principles*, mathematical objects and other universals are merely ideas or "modes of thinking" that reside in the mind alone (AT VIIIA:27, CSM I:212).[38] If Descartes is willing

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1998, 89: 161–80. Descartes is explicit about this point in a rich letter to an unknown correspondent (likely Mesland) of 1645 or 1646, AT IV:348–9; CSM III:279–80.

37   AT VII:381–2, CSM II:262.

38   For an extended discussion of Descartes on the ontological status of mathematical objects specifically, see Nolan, Lawrence. "The Ontological Status of Cartesian Natures." *Pacific Philosophical Quarterly*, 78 (1997), pp. 169–94; and (for universals generally) see my "Descartes's Theory of Universals." Some commentators have argued that Descartes

to allow that we *regard* geometrical objects as substances, even though they are merely ideal entities, then there is an important precedent in the Cartesian system for my claim that the mind-body union is a substance only in a conceptual sense: we *regard* it as a substance, even though strictly speaking it is not.[39],[40]

Drawing an analogy, in the way that I have here, between Descartes' remarks about mind-body union and his treatment of geometrical objects is somewhat ironic. Two leading defenders of trialism have appealed to a similar analogy in order to buttress the claim that the union constitutes a third kind of substance, over and above mind and body. But I think that their version of the analogy

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conceives mathematical objects (or their essences) as divine decrees (Schmaltz, Tad. "Platonism and Descartes' View of Immutable Essences." *Archiv Für Geschichte der Philosophie*, 73 (1991), pp. 129–70) or as quasi-Platonic entities residing in a third realm of *possibilia* (Kenny, Anthony. *Descartes: A Study of His Philosophy*. New York: Random House, 1968; and his *Descartes: A Study of His Philosophy*). I consider and reject these proposals in my "Reductionism and Nominalism," where I argue that such objects exist in human minds as innate ideas, considered with respect to their objective being. One point upon which we all agree, however, is that for Descartes there are no true geometrical objects in nature, which is the only point relevant to the present discussion.

39   One might also think that the geometrical analogy illuminates some of Descartes' other mysterious remarks about the union. There is reason to think that on his view we not only regard the union as a substance but, when doing so, we also regard properties that belong strictly to mind, such as sensations and passions, as properties of union. For example, this would be a way of understanding his remarks in *Principles* I, 48, when he speaks of the properties that "arise" from the mind's close and intimate union with the body (AT VIIIA:23, CSM I:209). Defenders of Cartesian trialism sometimes cite this passage as evidence that the union constitutes a third substance with its own distinctive modes (see e.g. Schmaltz, "Descartes and Malebranche on Mind and Mind-Body Union," p. 287f). Contrary to my first suggestion, however, Descartes may only be making a causal claim in this passage: strictly speaking, sensations are modes of mind, but they are caused by modes of the body. For Descartes' view that sensations are modes of mind, see e.g. AT VIIIA:33, CSM I:217. On either reading, trialism cannot gain a foothold.

40   In the Fifth Replies, Descartes says that we consider geometrical figures not as substances but as "boundaries [*termini*] within which a substance is contained." This might seem to contradict the claim that we regard such figures as corporeal substances, but I don't think it does given the context. Descartes is referring to plane geometry in this sentence and his point is merely that there are no one- or two-dimensional figures in nature: "Not that there are in the world substances which have length but no breadth, or breadth but no depth" (AT VII:381, CSM II:262). We cannot regard a two-dimensional figure as an actually existing corporeal substance but we can regard it as the surface of such a substance, which is just to say that we can regard it as an idealized corporeal object.

is misguided. I close this section by showing why it is misguided and why the analogy I have drawn is to be preferred.

Let me begin by sketching the analogy that Hoffman and Schmaltz purport to find in the text. In the passage from the Fifth Meditation cited at the beginning of this section, Descartes draws a distinction between invented or fictitious ideas and those ideas that have true and immutable natures. The difference is that invented ideas have parts or properties that can be excluded from them by a clear and distinct intellectual operation, whereas ideas having true and immutable natures do not. In the First Replies, Descartes attempts to illustrate this distinction by offering several examples of invented ideas whose parts or properties can be excluded from them in this way, *viz.* the ideas of a winged horse, an existing lion, and—most importantly for our purposes—a triangle inscribed in a square. The problem that commentators have found with the latter example is that he seems to contradict himself on whether this idea has a true and immutable nature, first denying it and then affirming it in a single passage.

> . . . we must notice a point about ideas which do not contain true and immutable natures but merely ones which are invented and put together by the intellect. Such ideas can always be split up by the same intellect, not simply by an abstraction but by a clear and distinct intellectual operation, so that any ideas which the intellect cannot split up in this way were clearly not put together by the intellect. When for example, I think of a winged horse or an actually existing lion, or a triangle inscribed in a square, I readily understand that I am also able to think of a horse without wings, or a lion which does not exist, or a triangle apart from a square, and so on; hence these things do not have true and immutable natures. But if I think of a triangle or a square (I will not now include the lion or the horse, since their natures are not transparently clear to us), then whatever I apprehend as being contained in the idea of a triangle—for example that its three angles are equal to two right angles—I can with truth assert of the triangle. . . . [However] if I consider the triangle inscribed in a square, with a view not to attributing to the square properties that belong only to the triangle, or attributing to the triangle properties that belong to the square, but a view to examining only the properties which arise from the conjunction of the two, then the nature of this composite will be just as true and immutable as the nature of the triangle alone or the square alone. And hence it will be quite in order to maintain that the square is not less than double the area of the triangle inscribed within it, and to affirm other similar properties that belong to the nature of this composite figure. (AT VII:117–8, CSM II:83–4)

Edwin Curley[41] and Anthony Kenny (1968, 154) have both concluded on the basis of this passage that Descartes is inconsistent about whether (the idea of) a triangle inscribed in a square has a true and immutable nature. But Hoffman and Schmaltz argue that Descartes can be absolved of contradiction if we understand his remarks in a different way. Hoffman holds that we should read Descartes as relativizing the notion of having a true and immutable nature, just as he argues that Descartes relativizes the notion of a complete thing in the Fourth Replies (though, for the purposes of his argument for trialism, the analogy goes the other way). Having a true and immutable nature is relativized to different purposes we have in thinking about the composite or to different sets of properties (1999, 253). Similarly, Schmaltz thinks that Descartes' point is that "considered in one way, the idea of the composite figure represents an invented nature, while considered in another, it represents an immutable nature" (1992, 290). Unlike Hoffman, Schmaltz does not speak of a relativizing strategy, but he does think that the same idea represents both an invented nature and a true and immutable one depending on which set of properties one is considering. If one is considering the properties that belong exclusively to a triangle or to a square then the idea of the triangle inscribed in a square represents an invented nature, but if one is considering properties that arise because of their union, such as that the square is not less than double the area of the triangle inscribed within it, then the idea represents an immutable nature (1992, 291).

It is easy to see how this geometrical example, so interpreted, could be used to defend the claim that the union constitutes a third substance, even though its parts are substances in their own right, and to show that the union has distinctive properties such as sensations and passions that do not belong to its parts alone. Hoffman and Schmaltz attempt to do just that.[42] Their proposals are ingenious, but I think their version of the geometrical analogy fails because they have misconstrued Descartes' point in this passage. The main source of confusion is the expression "triangle inscribed in a square," when Descartes says that the idea of such a figure does and does not have a true and immutable nature. It easy to be misled by this expression into supposing that Descartes has in mind a single thing here or, more precisely, a single idea. But I shall argue that the term "triangle inscribed in a square" has dual reference in this passage. In the first part of the passage he uses it to refer to the confused, invented idea of such a figure. This idea is composite by its very nature, for it is composed of the ideas of

41   Curley, Edwin. *Descartes Against the Skeptics*. Cambridge, Mass.: Harvard University Press; Oxford: Blackwell, 1978, pp. 151–52.

42   Hoffman, "Cartesian Composites," pp. 252–5; Schmaltz, "Descartes and Malebranche on Mind and Mind-Body Union," pp. 11–13.

square and triangle. But in the latter half of the passage he uses this term to refer to an innate, clear and distinct idea of such a figure. This idea is simple and thus cannot be analyzed into parts, which is just to say that we cannot exclude its properties by a clear and distinct operation of the intellect. If one understands Descartes as using the term "triangle inscribed in a square" ambiguously in this way, then there is a much more elegant and satisfying solution to the apparent contradiction in this passage than the one offered by Hoffman and Schmaltz: Descartes is not saying that the same idea both does and does not have a true and immutable nature but instead is speaking of different ideas.[43]

Admittedly, Descartes could be much clearer about this point in this passage. He even carelessly refers to the innate idea of triangle inscribed in a square as a composite. Nevertheless, there are strong textual and philosophical reasons for the interpretation I have offered. Beginning with textual considerations, in a letter to Mersenne written in the same year the *Meditations* was published, Descartes reflects back on these remarks from the First Replies:

> I do not understand your question whether our ideas are expressed by a simple term. Words are human inventions, so one can always use one or several to express the same thing. *But I explained in my Reply to the First Objections how a triangle inscribed in a square can be taken as a single idea or as several.* Altogether, I think that all those which involve no affirmation or negation are innate in us; for the sense organs do not bring us anything which is like the idea which arises in us on the occasion of their stimulus, and so this idea must have been in us before (AT III:417–18, CSM III:187; emphasis added).

The general point of this passage is that the way one uses words is a matter of convention, and thus it is arbitrary whether one or several words are used to refer to the same thing or to different things. To illustrate this general point, he cites the example that we have been discussing and says explicitly that the term "triangle inscribed in a square" can be used to refer to one idea or several. I read this as saying that one can use this term to refer to the simple, innate idea of such a figure *or* to the invented idea, which is composed of multiple ideas (*viz.*, the idea of triangle and the idea of square). This is the same equivocal use of the term that is at work in the passage from the First Replies.

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43   For an excellent treatment of Descartes' compositional theory of fictitious ideas, which take innate simples as their ultimate parts, see Nelson, Alan. "Descartes's Ontology of Thought." *Topoi*, 1997, 16: 163–78.

Turning now to philosophical considerations, there is a serious difficulty with Hoffman and Schmaltz's version of the geometric analogy. They claim that a triangle inscribed in a square has a true and immutable nature, not in relation to the properties that belong to the square alone or to the triangle alone, but only in relation to the unforeseen properties that arise out of the composite figure. But since virtually every composition has properties that arise in this way, this saddles Descartes with the view that virtually every fictitious idea has or represents a true and immutable nature. This consequence reinvigorates an objection that was first raised by Caterus in the First Set of Objections, namely, that if the ontological argument were valid, then one could proliferate ontological arguments for existing lions, supremely perfect islands, etc. The trick is simply to build existence into the concept of the composite entity. Aware of this difficulty with their respective interpretations, Hoffman and Schmaltz attempt to resolve it in different ways. Schmaltz's response is brief and intended to be merely suggestive. He asserts that Descartes' best reply is to privilege mathematical natures since the properties that follow them "increase our knowledge of the fundamental nature of the world and, in particular, of the nature of extension" (1992, 12, note 17). Although it is true that Descartes lays particular stress on mathematical natures in this context, it is not clear how this suggestion would solve the problem. What about the case of an existing triangle? Presumably, Descartes would not want it to follow from its nature that there are any triangles in the world, or from the nature of any contingent being that it exists. And if we privilege mathematical natures, what are we to say about the all-important case of God, for which the geometrical examples are serving merely as an analogy?

Rather than privileging certain types of natures, Hoffman argues that on the relativized account of whether something has a true and immutable nature, Descartes can still block the inference that an existing lion exists, from our idea of such a being.

> . . . an existent lion does not have a true and immutable nature with respect to the properties of being a lion and existence because those properties are separable. It has a true and immutable nature only with respect to any new properties F generated by their composition that we cannot deny of an existent lion once they are recognized. So we can infer with certainty that an existent lion is F once we recognize that we cannot separate the idea of F from the idea of existent lion, but that does not entitle us to infer that a lion exists. (1999, 254)

Hoffman's proposal might seem more promising than Schmaltz's, but it errs in supposing that an object has a true and immutable nature if and only if the

properties that can be derived from our idea of it are "new" or unforeseen.[44] This is sometimes referred to in the secondary literature as the "unforeseen consequences" criterion for whether something has a true and immutable nature. In making this assumption, Hoffman is in good company, following a recent scholarly tradition that goes back to Margaret Wilson.[45] But a careful analysis of the texts and the philosophical issues involved shows that it is mistaken.

It is important to keep in mind that Descartes introduces the notion of a true and immutable nature in order to ground the ontological argument, which attempts to show that (necessary) existence is contained in the clear and distinct idea of God. Suppose that I attain this perception. According to the version of the rule for truth that Descartes enunciates in the Fifth Meditation, whatever I clearly and distinctly perceive to be contained in the true and immutable nature of something is true of that thing. Thus, I am entitled to conclude that God exists. However, Descartes is concerned that many meditators will have trouble attaining the requisite clear and distinct perception because of the preconceived opinion that the idea of God is fictitious or, having attained this perception once, may be subsequently plagued with doubts of the following sort. In the Third Meditation, I discovered that I have a clear and distinct idea of God that represents him as infinite in every way—infinite in power (omnipotent), infinite in knowledge (or omniscient), infinite in time (or eternal), etc. However, there is one attribute that I did not notice at the time, namely existence. In noticing that it is included now, in the context of the Fifth Meditation, how can I be sure that I have not fictionalized my idea of God by superadding existence to it? In other words, how can I be certain that my idea of God *qua existing thing* is a "true and real entity" and not simply some mental fiction that I have invented, by compounding the ideas of God and existence, in the same way that one forms the ideas of an existing lion or of a winged horse?[46] Caterus accuses Descartes of doing just that, but Descartes already anticipates this objection in the Fifth Meditation. The reply that he offers there and in the First Replies is largely the same, if only in slightly different terms.[47]

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44   Hoffman's criterion also has the counterintuitive consequence that we cannot infer with certainty that an existent lion is a lion (despite knowing that it has a true and immutable nature).

45   1978, 171f.

46   For an extended discussion of this point and the ontological argument more generally, see Nolan, Lawrence. "The Ontological Argument as an Exercise in Cartesian Therapy." *Canadian Journal of Philosophy*, 35 (2005), pp. 521–62.

47   AT VII:120, CSM II:85.

The criterion for whether an idea has a true and immutable nature is that its properties cannot be excluded from it by a clear and distinct operation of the mind. This is what Descartes affirms in the First Replies.

> . . . we must notice a point about ideas which do not contain true and immutable natures but merely ones which are invented and put together by the intellect. Such ideas can always be split up by the same intellect, not simply by an abstraction but by a clear and distinct intellectual operation, so that any ideas which the intellect cannot split up in this way were clearly not put together by the intellect. (AT VII:117, CSM II:83–4)

Since invented ideas were literally "put together" (*componere*) by us, we can add or subtract any properties we like from us. For example, we can imagine a creature with one horn, two, three, or more. But innate ideas of true and immutable natures are not like that. The content of these ideas imposes itself on our thought, compelling us to think of them in prescribed ways. This is not to say that if I am thinking of a triangle that I must attend to the fact that its angles are equal to two right angles—I can always abstract from any given property—but it does mean that I cannot clearly and distinctly exclude this property.[48]

What this discussion shows is that the criterion for whether a given idea is true and immutable, as opposed to invented, is not that it has *unforeseen* properties but that it has properties which, *once seen*, cannot be excluded by a clear and distinct operation of the intellect. Why then have Hoffman and others thought otherwise?[49] Descartes never mentions anything about unforeseen consequences in the First Replies (which is telling), but he does say something suggestive in the Fifth Meditation, when first introducing the notion of a true and immutable nature. In the passage cited earlier, he claims that it is clear

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48   Wilson objects that the idea of a triangle *is* analyzable after all: "But if I can think of a lion without existence, cannot I not equally think of a figure with angles but not a *tri*angle? The notion of an existing lion, and that of a triangle seem to be equally analyzable" (*Descartes*, p. 151). This misses the point. Yes, I can think of a figure with angles that is not a *tri*angle, but Descartes' claim is that if I am clearly and distinctly perceiving a triangle then, *while attending to that idea*, I cannot exclude any of its properties.

49   Hoffman says, "the mark of things having true and immutable natures is that we can demonstrate properties of them that we did not previously recognize and *that once recognized we cannot deny*" ("Cartesian Composites," pp. 253–4; emphasis added). So, to be fair, he does acknowledge the other criterion that I have defended. Nevertheless, he mentions it in passing here and then drops it, basing the relativizing strategy exclusively on the criterion of unforeseen consequences.

that an object such as a triangle has a true and immutable nature from the fact that various properties can be demonstrated of it,

> . . . for example that its three angles equal two right angles, that its great-est side subtends its greatest angle, and the like; and since these proper-ties are ones which I now clearly recognize whether I want to or not [*velim nolim*], *even if I never thought of them at all when I previously imag-ined the triangle*, it follows that they cannot have been invented by me (AT VII:64, CSM II:44; emphasis added).

Again, Descartes stresses that we know that an object such as a triangle has a true and immutable nature because it has properties that cannot be excluded from the idea of it; I am compelled to recognize them "whether I want to or not." But then he adds "even if never thought of them . . . previously . . .," which has led commentators to embrace the criterion of unforeseen consequences, but the phrase "even if" indicates that this remark is incidental. The object could have properties that he did not foresee, but it could also have properties that he did previously discover.[50] Regardless, the properties in question cannot be denied of the thing, once recognized.[51]

Understanding the criterion for true and immutable natures is important because, on Hoffman's view, Descartes invokes the relativizing strategy to answer Caterus' objection that even fictitious objects have unforeseen con-sequences (Caterus too was misguided here). Hoffman argues that Descartes relativizes true and immutable natures to any new properties that emerge from a composite. But if am right, and the notion of unforeseen consequences plays only an incidental role in Descartes' discussion, then the relativizing strategy is a non-starter. There are two other considerations that reinforce this interpretation. First, it is clear from the context of both the Fifth Meditation and First Replies that Descartes intends to draw a sharp distinction between innate, "true and immutable" ideas and fictitious ones, the latter of which are

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50   Commentators systematically ignore Descartes' remark in the paragraph immediately before this passage, where he invokes the Platonic theory of recollection. He says there that, far from being unforeseen, the truths that can be demonstrated of geometrical figures, numbers, etc. are so "transparent" and "so much in harmony with my nature, that . . . it seems that I am not so much to learning something new as remembering what I knew before. . . ." (AT VII:63–4).

51   Incidentally, this criterion is consistent throughout the *Meditations*. At the end of the Third Meditation, Descartes remarks that he knows that his idea of God is not invented but innate because he is "plainly unable either to subtract anything from it or to add any-thing to it." (AT VII:51, CSM II:35)

formed by compounding other ideas. Descartes needs this distinction to be sharp so as to defeat the objection that the idea of God *qua* existing substance is not one of these fictitious composites. But on Hoffman's interpretation the distinction is blurred, for the same idea is both innate and invented relative to different sets of properties. Schmaltz tells a similar story. Second, Hoffman and Schmaltz both assume that we can make true predications of fictitious objects as much as we can of what Descartes sometimes calls "true and real entities" (AT V:160, CSM III:343). This overlooks the crucial fact that there are two other criteria operating in this context, namely, clarity and distinctness. As I noted above, Descartes reformulates the rule for truth in the Fifth Meditation in terms of what is clearly and distinctly contained in the true and immutable nature of something. This rule is restricted to ideas that can be clearly and distinctly perceived, which would exclude fictitious or invented ideas. So does a winged horse have wings? We might say so when speaking loosely, but we cannot clearly and distinctly perceive it. Indeed, Descartes does not think that we can clearly and distinctly perceive the idea of a horse *qua* horse, let alone the idea of a fictitious creature. In the passage from the First Replies previously cited, he writes:

> . . . But if I think of a triangle or a square (I will not now include the lion or the horse, since their natures are not transparently clear to us). . . . (AT VII:117, CSM II:84)

This remark reflects general rejection of Aristotelian natural kinds. Since all bodies have the same essence, namely extension, we can clear and distinctly perceive the extension of any body (recall the wax example in the Second Meditation), but not that it belongs to a particular species or kind, for there are no kinds in the Cartesian material universe.

5   Conclusion

I have argued that Descartes' human being is a substance or unity only in a conceptual sense. Descartes is a strict mind-body dualist and the "union" of mind and body consists merely in their causal interaction. However, he also holds that the ordinary person considers herself to be a union in a stronger sense. When not engaged in philosophy, one perceives the interaction of mind and body and, at the same time, regards oneself as a single thing. It is important to see that this way of regarding oneself is confused. I have also stressed that in making this latter claim Descartes intends only to describe what the ordinary

person actually does. He does not purport to offer a metaphysical theory about the status of the mind-body union that might conflict with his official dualism.

I have also argued that Descartes self-consciously draws upon this view about how one ordinarily regards oneself in order to accommodate the traditional hylomorphic conception of the human being as a substance or *ens per se*, without having to compromise his commitment to dualism. What Descartes stresses most in his replies to Arnauld, Regius, etc. is that mind and body are two really distinct substances. But the fact that we habitually regard mind and body as one thing allows him to say things that he believes will palliate the Scholastics, even if he is speaking in the conceptual and linguistic modes of discourse. This "concession" to the traditionalists is of course quite modest, for Descartes is not actually endorsing their view. But it allows him to give the impression of doing so without being dishonest.

The conceptualist interpretation has a few notable textual and philosophical attractions. First, it allows us to explain rather than dismiss Descartes' provocative remarks about mind-body union. Second, it shows how these remarks square with his official dualism, and it does so without having to say that Descartes vacillated or contradicted himself on the status of the union, as some commentators have.[52] Third, it jibes well with other forms of conceptualism in Descartes' philosophy, such as his account of the relation between geometrical figures and their so-called "properties."[53] Finally, it offers a new perspective on the *Meditations*: one can read this work as a systematic effort to counteract the natural tendency that each person has to regard herself confusedly as a single thing, rather than as a mind that is really distinct from the body.[54]

Spinoza, Maimonides, and Prophecy

Steven Nadler

These days there should certainly be nothing surprising about the claim that Spinoza stands in an important philosophical relationship to Maimonides. Studies from the late nineteenth century on, including important works by Harry Wolfson,[1] Leon Roth,[2] Shlomo Pines,[3] Warren Zev Harvey,[4] and, more recently, Heidi Ravven,[5] Carlos Fraenkel[6] and Catherine Chalier[7] have done much to elucidate the connections, critical or otherwise, between the ideas of the Jewish heretic from seventeenth-century Amsterdam and those of his medieval rationalist ancestor. Indeed, Spinoza, in the *Theological-Political Treatise* (henceforth, TTP), not only explicitly cites Maimonides as a target in one of the work's main polemical chapters, but also reveals in a more subtle manner the latter's influence. Writing in 1981, in his seminal article laying out some ways in which Spinoza was directly influenced by Maimonides, Harvey suggested that "the portrayal of Spinoza as a Maimonidean is admittedly controversial . . . it generally has not been held that there was a distinctive Maimonidean influence on Spinoza."[8] Now, almost thirty years later, it is hard to imagine anyone being so defensive on this matter.[9]

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1 Wolfson, Harry. *The Philosophy of Spinoza: Unfolding the Latent Processes of His Reasoning*. Cambridge, MA: Harvard University Press, 1934.

2 Roth, Leon. *Spinoza, Descartes, & Maimonides*. New York: Russell and Russell, 1924/1963.

3 Pines, Shlomo. "Spinoza's *Tractatus Theologico-Politicus*, Maimonides, and Kant." In W.Z. Harvey and M. Idel, eds., *Studies in the History of Jewish Thought*. Jerusalem: Magnes Press, 1997, pp. 660–711.

4 Harvey, Warren Zev. "A Portrait of Spinoza as a Maimonidean." *Journal of the History of Philosophy* 19 (1981): 151–172.

5 Ravven, Heidi. "Some Thoughts on What Spinoza Learned from Maimonides on the Prophetic Imagination, Part Two: Spinoza's Maimonideanism." *Journal of the History of Philosophy* 39 (2001): 385–406.

6 Fraenkel, Carlos. "Maimonides' God and Spinoza's *Deus sive Natura*." *Journal of the History of Philosophy* 44 (2006): 169–215.

7 Chalier, Catherine. *Spinoza, Lecteur de Maïmonide*. Paris: Cerf, 2006.

8 Harvey, "A Portrait of Spinoza as a Maimonidean", 151.

9 Wiep van Bunge, however, takes issue with such a claim in his "Baruch of Benedictus? Spinoza en de 'marranen'", *Mededelingen vanwege het Spinozahuis* 81 (2001); "Spinoza's Jewish Identity and the Use of Context", *Studia Spinozana* 13 (1997 [2003]): 100–118; and *From Stevin to Spinoza: An Essay on Philosophy in the Seventeenth-Century Dutch Republic*. Leiden,

There are many aspects of Spinoza's thought on which the question of Maimonides' influence might be raised—not just in the more obvious case of the religious and theological themes of the TTP, but also (as I have argued elsewhere)[10] with respect to the metaphysical and moral themes of the *Ethics*. In this paper, I would like to focus on the TTP and, more precisely, on the topic of prophecy.

There can be little question that Spinoza's account of prophecy, and especially his explanation of the role that the imagination plays in prophetic revelation and communication, is deeply indebted to the account offered by Maimonides in the *Guide of the Perplexed*, and many scholars have taken note of this. As in the discussion of the interpretation of Scripture in chapter seven of the TTP, the great twelfth-century rabbi and physician comes in for serious criticism in chapters one and two as well for his views on prophecy, although in this case the attack is more implicit, since Spinoza never actually cites Maimonides' account as that against which he is reacting. But it is also the case that Spinoza's own account of prophecy owes much to what Maimonides had to say about the phenomenon. Thus, it seems perfectly reasonable to speak, as one recent writer does, of "the quite obvious influence of Maimonides' account of prophecy upon Spinoza's account in the TTP."[11]

However, while most commentators agree that Spinoza had something to learn from Maimonides about the nature of prophecy and the role of the prophet in society, it seems that almost all discussions of Spinoza and Maimonides on prophecy construe the positive and negative features of that influence rather narrowly. Scholars for the most part focus on Maimonides' positive influence in illuminating the role of imagination in Biblical prophecy.[12]

2001. I offer a critique of Van Bunge's view in "The Jewish Spinoza", *Journal of the History of Ideas* 70 (2009): 491–510.

10   See Nadler, Steven. *Spinoza's Heresy: Immortality and the Jewish Mind*. Oxford: Oxford University Press, 2002.

11   Ravven, "Some Thoughts, Part Two", 386.

12   For example, Strauss, Leo. *Spinoza's Critique of Religion*. Chicago: University of Chicago Press, 1997; Kreisel, Howard. *Prophecy: The History of An Idea in Medieval Jewish Philosophy*. Dordrecht: Kluwer, 2001; Kogan, Barry. "Understanding Prophecy: Four Traditions." In Steven Nadler and Tamar Rudavsky, eds., *The Cambridge History of Jewish Philosophy: From Antiquity through the Seventeenth Century*. Cambridge and New York: Cambridge University Press, 2009, pp. 481–523; Pines, "Spinoza's *Tractatus Theologico-Politicus*, Maimonides, and Kant"; and Feldman, "Introduction" to Spinoza, *Theological-Political Treatise*. Second edition. Indianapolis: Hackett, 2001. Ravven goes somewhat further and looks at "what Spinoza learned from Maimonides" regarding the political role of prophetic writings; see "Some Thoughts, Part Two".

And, turning to the negative side, they do so to highlight the way in which, to quote one recent discussion, "Spinoza uses Maimonides' theory…to undermine the special claims Maimonides and others made for prophecy."[13] That is, what Spinoza learned from Maimonides is that the imagination is the primary faculty at work in prophecy and that this is what distinguishes the prophet from the philosopher. But for Spinoza, contrary to Maimonides, what this implies is a serious epistemological devaluation of prophecy. To put it succinctly, Spinoza's *reductio* of Maimonides' account is the conclusion that the prophets were simply individuals with particularly vivid imaginations.

To be sure, the role of the imagination in prophecy and its implications for the stature of the prophet is a crucial dimension of the relationship between Spinoza and Maimonides on this topic; it is also essential for Spinoza's overall religious and political project in the TTP. By diminishing the epistemic status of prophecy and showing that the Bible does not offer true knowledge on philosophical, scientific, and theological matters, Spinoza furthers his goal of undermining ecclesiastic pretensions to extensive authority over citizens' public, private, and spiritual lives. But what I want to do in this essay is highlight what I believe to be aspects of Spinoza's account of prophecy that also bear an important relationship to Maimonides' account, aspects that reflect a positive influence but that, as far as I can tell, have gone mostly unnoticed or at least unexamined by commentators.

One necessary *caveat lector* before I begin my discussion. Although I focus in this paper on Spinoza's relationship to Maimonides, I do not mean to deny that there might be other philosophical influences, especially Jewish philosophical influences, on Spinoza's account of prophecy. It was not uncommon in medieval Jewish (and Islamic) philosophy to insist upon the important role of the imaginative faculty in the prophet. Judah Halevi, in the *Kuzari*, does so, as does Isaac Abravanel in his commentary on Maimonides' *Guide*.[14] And Isaac

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13   Feldman, "Introduction", xx. I should also acknowledge an interesting paper by Sacks, Elias. "Spinoza, Maimonides, and the Politics of Prophecy," in which he argues that the account of prophecy in the TTP is an attempt to undermine some of Maimonides' political views.

14   Aspects of Spinoza's account of prophecy should, in fact, be closely examined in the context of medieval Jewish thought generally, which in turn needs to be situated in its proper Aristotelian and Arabic contexts (especially al-Farabi, who, it has been claimed, insisted that the imagination alone produces prophecy; see Pines, Shlomo. "The Limitations of Human Knowledge According to Al-Farabi, ibn Bajja, and Maimonides." In Harvey and Idel, eds., *Studies in the History of Jewish Thought*, 404–431. For broad discussion of Jewish philosophical views on prophecy, see Kreisel, *Prophecy*, and Kogan, "Understanding Prophecy". See also Pines, Shlomo. "Spinoza's *Tractatus Theologico-Politicus* and the

Polgar, like Spinoza in his critique of Maimonides, insists that the prophet has no justified claim to philosophical knowledge.

I especially do not want to suggest that Maimonides' discussion, particularly as this appears in the *Guide of the Perplexed*, is the only possible source for those aspects of Spinoza's views that I will discuss, just as Maimonides' account is not the only possible target of his critique. However, I do believe that much of what Spinoza has to say about prophecy, and especially the features on which I shall focus, does indeed come from his study of Maimonides. The fact that they occur within what is clearly and on the whole a direct (if implicit) critique of Maimonides' theory really does make it very difficult to think that Spinoza's discussion of prophecy has any more important context than the Maimonidean one. In other words, I completely agree with Harvey who, while he does not address the topic of prophecy, argues that, while "the medieval Hebrew philosophic literature in general . . . exercised a significant formative influence on Spinoza" and on his philosophy, primacy ought nonetheless be given to a distinctive Maimonidean influence on him, both because we know that Spinoza closely studied Maimonides (and the *Guide* in particular) and because of the impact of the *Guide* on all the later medieval Jewish philosophers who might also have influenced Spinoza (such as Gersonides, Crescas, and Abravanel).[15]

Section 1

Maimonides includes the belief in true prophecy as one of the thirteen "pillars" of Judaism, along with a belief in the existence of God the creator, His unity, His providence, and His giving of the Law to Moses, among other principles. (The denial of any of these principles will bring one exclusion from the world-to-come.) The sixth foundation of the Law, he says, is that "it should be known that, within the species of humanity, there are individuals who have a greatly superior disposition and a great measure of perfection . . . These people are prophets."[16]

Jewish Philosophical Tradition." In Harvey and Idel, eds., *Studies in the History of Jewish Thought*, 712–734. On Abravanel, see Feldman, Seymour. "Prophecy and Perception in Isaac Abravanel." In A. Ivry, E.R. Wolfson, and A. Arkush, eds., *Perspectives on Jewish Thought and Mysticism*. Amsterdam: OPA, 1998, pp. 223–235; and Reines, Alvin. "Abravanel on Prophecy in the *Moreh Nebukhim*." *Hebrew Union College Annual* 31 (1960): 107–215.

15   Harvey, "A Portrait of Spinoza as a Maimonidean", 154–5.

16   Maimonides, *Commentary on the Mishnah*, Sanhedrin, Chapter 10.

In the *Guide*, Maimonides, like the Arabic thinkers in whose tradition he stood, situates the prophet and his skills within the grand cosmic scheme of things. In Maimonides' Aristotelian/Ptolemaic system, the universe is a series of concentric material spheres—made of a "noble" fifth matter, or quintessence, different from the matter composing terrestrial bodies—with the immobile earth at its center. There are nine major spheres: eight inner spheres, each of which houses one of the heavenly bodies (the known planets, the moon, and the sun), and an outermost sphere containing the fixed stars. Each sphere is also an intelligent being insofar as it has an indwelling intellect, which functions as the sphere's animating soul. Finally, associated with each sphere is a second, "separate intellect" which acts as the governing power of that sphere (Maimonides also refers to it as that sphere's "angel"). The particular separate intellect of this sublunar realm that we inhabit is called the Active Intellect.

Maimonides speaks of the creation of the cosmos as an "overflow" that derives directly from God, who exists beyond the outermost sphere. Through this overflow emanate the forms that constitute all things, eventually terminating in the most basic elements of this world. "This term, I mean 'overflow', is sometimes also applied in Hebrew to God, may He be exalted, with a view to likening Him to an overflowing spring of water … that overflows in all directions and does not have one particular direction from which it draws while giving its bounty to others"[17] The "bounty" of this overflow consists in being, as this is communicated to the spheres, their contents and the separate intellects. The being or reality of all celestial and terrestrial things is thus continuously dependent on this ontological extension of God's being. The overflow also has a cognitive dimension, one that reflects God's understanding of eternal truths and His creator's knowledge of the principles of the universe. From God comes knowledge that flows down through the higher separate intellects and reaches, at last, the Active Intellect. This knowledge is accessible to those human intellects that have perfected themselves and thus achieved a kind of union with that final and most proximate of the separate intellects. The overflow thus provides an extended epistemic link between God's mind and finite minds.[18]

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17 Maimonides, *Guide* II.12. The translation is from Maimonides, Moses. *Guide of the Perplexed.* 2 vols., trans. Shlomo Pines. Chicago: University of Chicago Press, 1963; henceforth, P, p. 279.

18 This is, of course, a highly simplified summary of Maimonides' cosmology; see *Guide* II.2–6. For a discussion of the role of the Active Intellect in human cognition, see Stern, Josef. "Maimonides' Epistemology." In K. Seeskin, ed., *Cambridge Companion to Maimonides*. Cambridge: Cambridge University Press, 2005. Pp. 105–133, especially pp. 110–115.

There are several conditions that must obtain before an individual becomes a prophet. First, he must be in good physical condition, enjoying a "perfection of his bodily faculties"; this is both because an infirm body and a disruptive temperament will cause too many distractions from the life of the mind, and because the imagination, which is central to prophecy as Maimonides understands it, is a part of the body (viz., the brain). Second, he must have perfected his moral character and attained a high state of virtue; a wicked, or even imperfectly ethical person, can never be a prophet. A prophet must be a moral paragon and be able to lead others toward goodness. He must show the requisite "renunciation of and contempt for bodily pleasures". Indeed, one sure way of determining that a person is, despite his pretensions, *not* a prophet is if he does not lead an ethically austere life, if he is easy prey for worldly temptations.

Possession of the best temperament and bodily constitution and supreme moral virtue, however, are not sufficient to make one a prophet. If they were, then prophecy would be a relatively easy and, in principle, widespread phenomenon. Two further conditions are necessary:

> Know that the true reality and quiddity of prophecy consist in its being an overflow from God, may He be cherished and honored, through the intermediation of the Active Intellect, toward the rational faculty in the first place and thereafter toward the imaginative faculty. This is the highest degree of man and the ultimate term of perfection that can exist for his species; and this state is the ultimate term of perfection for the imaginative faculty. This is something that cannot by any means exist in every man. And it is not something that may be attained solely through perfection in the speculative sciences and through improvement of moral habits, even if all of them have become as fine and good as can be. There still is needed in addition the highest possible degree of perfection of the imaginative faculty in respect of its original disposition.[19]

A person of fine body and outstanding morality becomes a prophet only when he also reaches perfection in his intellect and his imagination. He perfects (or "actualizes") his intellect through the pursuit of "knowledge and wisdom"— that is, science and philosophy—and thereby attains cognitive union with the Active Intellect, the repository of all such speculative understanding. In acquiring "a perfect and accomplished human intellect", he comes to enjoy the intellectual overflow from God, which now reaches his rational faculty. If this is where it ended, if the overflow went only so far as the rational faculty, then

19   *Guide* II.36, P 369.

such a person, with his perfected intellect, would belong to "the class of men of science engaged in speculation"—that is, he would be a philosopher.

However, should this individual also be perfect in his imagination, thereby rendering it capable in turn of receiving the overflow from the rational faculty, then he is endowed with the ability to prophesize. Prophecy itself occurs when the senses are at rest and the onrush of material from the external world is quieted. This allows the imagination, which is ordinarily responsible for retaining images conveyed by the senses, to receive the overflow from the rational faculty and rework its content. The result is visions and "veridical dreams" informed by the speculative knowledge of the overflow.

> Now there is no doubt that whenever—in an individual of this description—his imaginative faculty, which is as perfect as possible, acts and receives from the intellect an overflow corresponding to his speculative perfection, this individual will only apprehend divine and most extraordinary matters, will see only God and His angels, and will only be aware and achieve knowledge of matters that constitute true opinions and general directives for the well-being of men in their relations with one another.[20]

A prophet, in other words, is someone who knows everything that the philosopher knows, but grasps it by way of concrete images. (The only exception to this is Moses, who communicated with God directly and not by means of images.) He also has the additional skill of being able to communicate such matters to others in the more accessible form of imaginative narratives (e.g., parables), rather than in abstract theories.

> The case in which the intellectual overflow overflows only toward the rational faculty and does not overflow at all toward the imaginative faculty— either because of the scantiness of what overflows or because of some deficiency existing in the imaginative faculty in its natural disposition, a deficiency that makes it impossible for it to receive the overflow of the intellect—is characteristic of the class of men engaged in speculation. If, on the other hand, this overflow reaches both faculties—I mean both the rational and the imaginative . . . and if the imaginative faculty is in a state of ultimate perfection owing to its natural disposition, this is characteristic of the class of prophets.[21]

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20   *Guide* II.36, P 372.
21   *Guide* II.37, P 374.

The role that the imagination plays actually gives the prophet one epistemic advantage over the philosopher. Because of the imaginative way in which he receives the content of the overflow, through dreams and visions, he perceives things that the more abstract and theoretically inclined philosopher does not. He can see "what will happen and [apprehend] those future events as if they were things that had been perceived by the senses."[22] The imagination allows the prophet to grasp connections between things that the philosopher might miss, "for all things bear witness to one another and indicate one another", albeit in ways not always perspicuous to, or as quickly grasped by, the merely speculative individual.

Maimonides' prophet is therefore, no less than the philosopher, a conveyer of truths: moral truths intended to improve our characters, but also "speculative" metaphysical, theological, and scientific truths intended to improve us intellectually. He communicates both practical principles for our personal and social well-being, and "correct opinions" that are philosophically demonstrable and that will improve the souls of his audience. The prophet can tell us how we ought to behave, but also what we ought to believe—about God, the universe, and ourselves.

Moreover, like the philosopher's wisdom, the prophet's visionary skill is a natural outgrowth of the development or perfection of his native faculties. Or, as Maimonides puts it, "prophecy is a certain perfection in the nature of man."[23] Maimonides thus thoroughly naturalizes the phenomenon of prophecy. A person is not chosen arbitrarily, or even deliberately by God to prophesize. There is no supernatural act, gratuitous or otherwise, by which God confers prophecy upon an individual. Maimonides explicitly rejects the view that "God, may He be exalted, chooses whom He wishes from among men, turns him into a prophet, and sends him with a mission", regardless of how well or ill prepared he may be for this vocation. For Maimonides, a person becomes a prophet through his own endeavors, working upon whatever gifts in his material and spiritual faculties he may have from nature and thereby taking advantage of the divine overflow that already exists as the ordering principle in the cosmos.

> When, in the case of a superior individual who is perfect with respect to his rational and moral qualities, his imaginative faculty is in its most perfect state and when he has been prepared in the way that you will hear, he will necessarily become a prophet, inasmuch as this is a perfection that belongs to us by nature. According to this opinion it is not possible

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22   *Guide* II.38, P 377.

23   *Guide* II.32, P 361.

that an individual should be fit for prophecy and prepared for it and not become a prophet.[24]

The necessity and possibility at work here is natural necessity and possibility, not absolute or logical necessity and possibility. In principle, God can always step in and interrupt the course of nature. In fact, aside from being the source of the overflow, God's role in prophecy is limited only to *preventing*, by a special act, someone from becoming a prophet who was otherwise on his way naturally to reaching the condition of prophecy.[25] It may sometimes happen that a person who, through the course of nature and his own efforts, is necessarily about to achieve prophesy is nonetheless, for some reason or another, kept by God from becoming a prophet.

Section 2

In the *Treatise*, Spinoza is deeply concerned to combat Maimonides' notion of the prophet-philosopher. One of the goals of the work is to secure the separation of the domains of religion and philosophy so that philosophers might be free to pursue secular wisdom unimpeded by ecclesiastic and political authority. In Spinoza's view, philosophical truth and religious dogma have nothing in common with one another, and one must not serve as the rule of the other. Philosophy should not have to answer to religion, no more than religion should have to be faithful to any philosophical system.

However, to the extent that Maimonides is correct in his account of prophecy, the content of prophecy *is*, at least in part, philosophical. The philosopher and the prophet, on Maimonides's view, both convey truths—indeed, the *same* truths. And because one truth necessarily coheres with other truths, philosophy and prophecy must, when properly understood, always be consistent. For Maimonides, philosophical truth and revealed truth will never clash.

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24   *Guide* II.32, P 361.

25   See *Guide* II.32, P 361. This preventative divine intervention can, however, be seen as Maimonides' way of introducing some element of divine choice into the phenomenon of prophecy. For discussions of Maimonides on prophecy, see Reines, Alvin. "Maimonides' Concept of Mosaic Prophecy." In *Hebrew Union College Annual* 40–41 (1969–70): 325–61; Kellner, Menachem. "Maimonides and Gersonides on Mosaic Prophecy." *Speculum* 52 (1977): 62–79; and Kreisel, *Prophecy*, chapter 3, among many other sources. For a bibliography, see Dienstag, Jacob. "Maimonides and Prophecy—Bibliography." *Daat* 37 (1996): 193–228.

Thus, prophetic texts must be read in such a way that they do not contradict a demonstrated philosophical principle. In turn, the philosopher must always respect the products of revelation, although the prophets' words may sometimes have to be read figuratively if a literal reading goes against an established philosophical truth.

To achieve his aim, then, Spinoza needs to show that there is a substantive (and not just presentational) difference between the information conveyed by revelation or prophecy and the knowledge which is the product of philosophy.

As commentators have well noted, there is one very important point on which Spinoza agrees with Maimonides, and he uses it to his own polemical advantage. The prophets of the Hebrew Bible, Spinoza argues, were indeed, as Maimonides says, men of great imagination. They were not, however, philosophers, or even very learned. They did not have training in the speculative sciences; in fact, many of them were uneducated. For this reason, their pronouncements should not be regarded as sources of theological, philosophical, scientific, or historical truth. The goal of Spinoza's discussion of prophecy, then, is to downgrade its epistemological status, particularly in relationship to philosophy and science. Revelation, as portrayed in the Bible, while it has a very important social and political function to play, is not a source of truth.

Spinoza defines "prophecy or revelation" as "the sure knowledge of some matter revealed by God to man."[26] On the face of it, this seems perfectly traditional, although somewhat puzzling for anyone acquainted with Spinoza's philosophical and religious project. Spinoza's rigorous naturalism will not allow for any supernatural facts. Whatever happens, happens in and through Nature. Thus, any knowledge that comes to a person must come to them in an entirely natural way; there are and can be no exceptions to this. In Spinoza's system there is no transcendent God exercising supernatural, ad hoc communications. There is room for divine revelation, but only in a very particular sense. Because for Spinoza God is identical with Nature, and all human knowledge is natural, it follows that all human knowledge is also divine. If God is Nature understood as the active, substantial cause of all things, then whatever is brought about by Nature and its laws is, by definition, brought about by God. The human mind being as much a part of Nature as anything else is, its cognitive states all follow ultimately from "God or Nature". "Prophetic knowledge is usually taken to exclude natural knowledge. Nevertheless, the latter has as

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26   TTP I, *Spinoza Opera*, 5 vols., ed. Carl Gebhardt. Heidelberg: Carl Winters Universitätsverlag, 1925; reprinted 1972; (henceforth, G), III.15. The translation is from Spinoza, *Theological-Political Treatise*, trans. Samuel Shirley. 2nd edition. Indianapolis: Hackett, 2001; (henceforth, S), 9. The word Spinoza uses here for "knowledge" is *cognitio*.

much right as any other kind of knowledge to be called divine, since it is dictated to us, as it were, by God's nature insofar as we participate therein, and by God's decrees."[27]

Moreover, the highest form of knowledge available to human beings is what Spinoza, in the *Ethics*, calls "the third kind of knowledge". This is an intuitive grasp of the essences of things, a deep causal understanding which situates them in their necessary relationships to each other and, more importantly, to higher, universal principles. "This kind of knowing proceeds from an adequate idea of the formal essence of certain attributes of God to the adequate knowledge of the essence of things."[28] In the third kind of knowledge, one grasps the nature of a thing or an event in such a way that one sees why it is as it is and could not possibly have been otherwise. But the universal causal principles of Nature just are God's (or Nature's) attributes of Extension (for physical things and their states) and Thought (for minds and their ideas). When a person connects the idea of a thing with the idea of the relevant attribute of God—when his idea of a body, for example, is properly cognitively situated with respect to the idea of the nature of extension and the laws of motion and rest—he has a thoroughly adequate knowledge of that thing. God's nature thus makes possible human knowledge in this epistemic sense, by serving as the foundation of our ultimate understanding of things. "Natural knowledge can be called prophecy"—that is, it can be called divine revelation—"for the knowledge that we acquire by the natural light of reason depends solely on knowledge of God and of his eternal decrees."[29] Only when we have knowledge of God or Nature do we truly have knowledge.

When 'prophecy' or 'divine revelation' is correctly understood in this broad sense, as whatever knowledge causally and epistemically depends on God, then it includes natural knowledge. More specifically, it includes philosophy and science, as well as other products of the intellect, and is therefore "common to all men." And while God is, in these ways, the ultimate cause of true knowledge, the proximate cause or the subject to which human knowledge immediately belongs is always a natural one: the human mind itself.

> Since, then, the human mind contains the nature of God within itself in concept, and partakes thereof, and is thereby enabled to form certain basic ideas that explain natural phenomena and inculcate morality, we are justified in asserting that the nature of mind, insofar as it is

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27   TTP I, G III.15; S 9.

28   *Ethics* IIP40s2.

29   TTP I, G III.15; S 9.

thus conceived, is the primary cause of divine revelation. For as I have just pointed out, all that we clearly and distinctly understand is dictated to us by the idea and nature of God—not indeed in words, but in a far superior way and one that agrees excellently with the nature of mind, as everyone who has tasted intellectual certainty has doubtless experienced in his own case.[30]

As Spinoza says, however, his aim in the *Treatise* is not to examine the nature of prophecy properly understood—something which, it might be said, he does in the *Ethics*—but to consider prophecy as it is portrayed and proclaimed in Scripture, the primary source of latter-day ecclesiastic authority and, consequently, of religious meddling in political affairs. And in Scripture, a very different picture of prophecy emerges, one that represents it as an affair not of the intellect, but of the imagination.

Spinoza notes that all prophecy in the Hebrew Bible occurs by way of words or images. The prophets hear voices and behold flashes of light; they confront talking animals and angels bearing swords; some even apprehend God in bodily form. Of course, not all the sights and sounds perceived by the prophets are real. According to tradition, only Moses heard real words from God. By contrast, Spinoza explains, the voice of God perceived by Samuel, Avimelech, Joshua and others was illusory; it occurred either in a dream or in a vision. What he believes this shows, then, is that, according to Scripture, prophecy came not through the intellect but through the imagination, since that is the human faculty responsible for the visual and auditory phenomena in unreal dreams and visions. "Hence it was not a more perfect mind that was needed for the gift of prophecy, but a more lively imaginative faculty."[31]

The fact that Biblical prophecy is a function of the prophet's imagination accounts for both the way in which the prophet apprehends the divine message and the narrative form in which he communicates it to others. Unlike the philosopher, whose material is intellectual and abstract and results in demonstrated propositions, the prophet receives and works with concrete appearances. "We shall no longer wonder why Scripture, or the prophets, speak so strangely or obscurely of the Spirit, or mind, of God ... and again, why God was seen by Micaiah as seated, by Daniel as an old man clothed in white garments, by Ezekiel as fire."[32] What the prophet sees are visions, and the insights that he gleans from those visions are, in turn, passed on through parables and

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30   TTP I, G III.16; S 10.

31   TTP I, G III.21; S 14.

32   TTP I, G III.28; S 20.

allegories. Such imaginative stories, while they may be an obstacle to intel-lectual understanding, are naturally suited for the products of the prophetic faculty and, just as importantly, for his audience.

Indeed, Spinoza insists, contrary to Maimonides, the intellect has nothing whatsoever to contribute to Biblical prophecy. The prophets were not par-ticularly educated individuals. They were usually simple men from common, even lowly backgrounds. They did not have philosophical wisdom, theological training, or scientific knowledge, and therefore they are not necessarily to be believed when they appear to pronounce on such topics. Prophecy as Spinoza sees it is not a cognitive discipline. If, as Spinoza says, "the gift of prophecy did not render the prophets more learned",[33] it is also true that listening to a prophet will not make one any more intelligent.

This is, in part, because prophecy is a highly subjective affair. It is an indi-vidualistic product shaped by both nature and nurture. What a prophet says on this or that matter, how the message is rendered by his imagination and what kind of vision or dream he has is a function of the prophet's native faculties and his upbringing. It all depends on the life he leads, the ideas that occupy his mind, the social status he holds, even his manner of speaking, his temper-ament and his emotional condition. The visions of a prophet who comes from the countryside will contain images of oxen and cows, while a more urbane individual will have a prophetic experience with very different content. And there is no reason why the preconceptions that inform and shape a prophet's revelation, like the beliefs acquired by anyone over the course of a lifetime, should necessarily be true. "I shall show . . . that prophecies or revelations also varied in accordance with the ingrained beliefs of the prophets, and that the prophets held various, even contrary beliefs, and various prejudices."[34] Since Joshua was no astronomer, he believed that the earth does not move and that the sun goes around the earth. Thus, when he saw the daylight lasting longer than usual during a battle, rather than attributing this to various meteorologi-cal phenomena he simply proclaimed that the sun stood still in the sky.

> If a prophet was of a cheerful disposition, then victories, peace and other joyful events were revealed to him; for it is on things of this kind that the imagination of such people dwells. If he was of a gloomy disposition, then wars, massacres and all kinds of calamities were revealed to him.

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33   TTP II, G III.35; S 26.
34   TTP II, G III.35; S 26.

And just as a prophet might be merciful, gentle, wrathful, stern and so forth, so he was more fitted for a particular kind of revelation.[35]

As great as the prophets were, and as important a role as their writings may play in society and history—and they do play a very important role, for both Spinoza and Maimonides, as Ravven has shown in her two-part study[36]—it remains the case that from an intellectual point of view they were inferior individuals. It is not just that they happened not to be as wise or learned as philosophers. Rather, their prophesizing abilities rendered them constitutionally unsuited for the rational pursuit of knowledge. In this regard, they fell below the human norm. In a prophet, the overly strong imagination gets in the way of the intellect. Its images interfere with the clear and distinct apprehension of adequate ideas. This is precisely what, in Spinoza's view, Maimonides got wrong. You cannot perfect *both* the intellect and the imagination. The improvement of one necessarily entails the weakening of the other. A strong intellect is an obstacle to imagination, and vice versa. "Those with a more powerful imagination are less fitted for purely intellectual activity, while those who devote themselves to the cultivation of their more powerful intellect, keep their imagination under greater control and restraint, and they hold it in rein, as it were, so that it should not invade the province of intellect."[37]

Section 3

Thus we see the way in which Spinoza, having learned from Maimonides the central role that the imagination plays in prophecy, uses that insight to undermine the prophets' pretensions to learning and thus to authority in domains in which they really have no qualifications. For both thinkers, the imagination is a personal and subjective faculty, and this is what, for Spinoza at least, makes the prophet unfit to pronounce on matters of philosophy and theology. Spinoza takes a Maimonidean tool and turns it against Maimonides' own theory. As I have said, this much has been well remarked upon by scholars.

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35   TTP II, G III.32; S 23.

36   Ravven, Heidi. "Some Thoughts on What Spinoza Learned from Maimonides About the Prophetic Imagination, Part One: Maimonides on Prophecy and the Imagination." *Journal of the History of Philosophy* 39 (2001): 193–214; and "Some Thoughts, Part Two".

37   TTP II, G III.29; S 21.

But there is more to the story of Maimonides' influence on Spinoza with respect to prophecy than this. For beyond the discussion of the imagination and its contrast with the intellect, Spinoza's own account reflects, in positive ways, other important features of what Maimonides has to say about prophecy in the *Guide*. In particular, I want to focus on three topics: (a) the prophet's extraordinary perspicuity; (b) the prophet's ethical superiority over other individuals; and (c) the naturalization of prophetic ability.

First, prophetic perspicuity. Spinoza admits that the fact that prophets were not learned does not mean that they were undistinguished from other individuals. This is a point that I believe is not sufficiently acknowledged in the literature.[38] In addition to granting that the prophets were endowed with supremely vivid imaginations, Spinoza also shares Maimonides' view that the prophet's imaginative abilities gives him something of an advantage—in particular, an *epistemic* advantage—over other people, including (for certain purposes) the philosopher. Spinoza says that "since the prophets perceived the revelations of God with the aid of the imaginative faculty, they may doubtless have perceived much that is beyond the limits of the intellect."[39] In the *Ethics*, Spinoza generally denigrates the epistemological value of the imagination in favor of the intellect. The ideas of the imagination, like those of the senses, are not a source of adequate knowledge, and serve mainly to foster the passions.[40] Nothing Spinoza says in the *Treatise* challenges this position. But he does grant that the strength of the prophet's imagination confers upon him remarkable, if short-lived, perspicuity. The prophet has a certain quickness of insight, an intuitive ability to envision the ramifications of things that is not available to the person guided solely by the rational intellect and limited to only logical tools. "Many more ideas can be constructed from words and images than merely from the principles and axioms on which our entire natural knowledge is based." The prophet, because of the strength of his imagination, is an extraordinarily perceptive person. He may not have the learning and deep metaphysical understanding of the philosophical sage, and he may

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38   Nancy Levene, for example, suggests that for Spinoza there is no respect in which the prophets were "exemplary", that for him they were "merely ordinary" individuals (*Spinoza's Revelation*. Cambridge: Cambridge University Press, 2004, p. 95).

39   TTP I, G III.28; S 20.

40   For studies of the role of the imagination in Spinoza's epistemology, see Moreau, Pierre-François. *Spinoza: L'Expérience et l'éternité*. Paris: Presses Universitaires de France, 1994; and Malinowski-Charles, Syliane. *Affects et conscience chez Spinoza*. Hildesheim: Olms. 2004.

never be able to achieve the condition of rational virtue and true *eudaimonia* of the intellectually perfected individual, but sometimes he can see things—practical things—that the latter cannot.

Spinoza does not elaborate on this particular gift of the prophet, but what he appears to have in mind is the fact that sometimes people who work with images and concrete ideas have a quickness of mind and depth of insight into ethical situations that the more abstract thinker lacks. Perhaps the prophet, with his practical judgment enhanced by the imagination, is better able to size up a concrete situation, or see how a general principle is to be applied in particular case. In this way, what Spinoza (and Maimonides) has in mind anticipates recent work on the place of imaginative thinking in moral philosophy.[41]

Second, Spinoza agrees with Maimonides that the prophets were ethically superior people, and that this constitutes yet another advantage that they have over other individuals. The prophets of Scripture had a finely honed sense of right and wrong and a keen (if not intellectual) understanding of moral matters. "The minds of prophets were directed exclusively toward what was right and good . . . they won praise and repute not so much for sublimity and preeminence of intellect as for piety and faithfulness."[42] The prophets were better able than most people to resist the temptations of sensual pleasures and concerned above all with righteous action. They thus have important lessons to impart about charity and justice. If the parables of the prophets are of any value—and Spinoza agrees that they are—it is because of the moral message they convey so effectively. The prophets, with their virtuous characters and creative narrative gifts, were thus particularly good ethical teachers. Spinoza insists that if there is a common theme—a "divine message"—running throughout the Bible's prophetic writings, it is a very simple one: "Love your neighbor". On this point, and this point alone, the prophets should be obeyed. The practical path to virtue provided by the prophetic writings may not be as exalted and transformative as the epistemic one offered by philosophy, but for most people it is the best one available.

Finally, there is the issue of the naturalization of prophecy. Only a couple of commentators have taken note of Spinoza's indebtedness to Maimonides in this regard, but they do so in only a general way and it remains the case that

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41   See, for example, Larmore, Charles. *Patterns of Moral Complexity*. Cambridge: Cambridge University Press, 1987.

42   TTP II, G III.31, 37; S 23, 28.

remarkably little has been said about it;[43] some scholars, in fact, have denied that this is something on which Spinoza and Maimonides are in agreement.[44]

Spinoza notes that the ancient Israelites recognized the extraordinary imaginative talent and moral superiority of the prophets, and accordingly elevated them above other human beings. But, he continues, because they could not explain through natural means how these individuals could be so virtuous and so perceptive, they attributed the prophets' powers to divine—i.e., supernatural—inspiration. "Whatever the Jews did not understand, being at that time ignorant of its natural causes, was referred to God."[45] Like unusual works of nature ("called works of God") and unusually strong men ("called sons of God"), so the prophets, who surpassed other human beings in certain ways and whose powers "evoked wonder" among the people, were said to possess the spirit of God.

> The following Scriptural expressions are now quite clear: the Spirit of the Lord was upon a prophet, the Lord poured his Spirit into men, men were filled with the Spirit of God and with the Holy Spirit and so on. They mean merely this, that the prophets were endowed with an extraordinary virtue exceeding the normal, and that they devoted themselves to piety with especial constancy.[46]

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43   Thus, Pines speaks of "the indubitable similarity between [Spinoza's] views on prophecy as a phenomenon governed by the laws of natural causality and those of Maimonides", and says that "Spinoza's explanation of prophecy as a natural phenomenon . . . is a mere clarification and extension of [the] view of Maimonides" ("Spinoza's *Tractatus Theologico-Politicus*, Maimonides, and Kant", p. 665). Chalier says that "comme Maïmonide avant lui . . . Spinoza décrit [la prophétie] comme un phénomène naturel", and that "les deux philosophes chassent le merveilleux de leur analyse sémantique de ce mot [*ruah*] et ils montrent qu'aucune suspension des lois de la nature n'est jamais requise, non pour devenir prophètes ni pour devenir philosophes" (*Spinoza, Lecteur de Maïmonide*, pp. 132, 142). Neither Pines nor Chalier goes into any detail.

44   Steven Smith, for example, says that "Spinoza's naturalistic reduction of prophecy and prophetic knowledge to the facts of human psychology is clearly an attack on the canonical treatment of that subject by Maimonides" (*Spinoza, Liberalism, and the Question of Jewish Identity*. New Haven: Yale University Press, 1997. P. 92). Smith believes that for Maimonides there is still something miraculous about prophecy, that it is not "wholly natural".

45   TTP I, G III.23; S 16.

46   TTP I, G III.27; S 19. "Exceeding the normal" is Shirley's translation of *supra communem*.

Although there is indeed something divine about their message, Spinoza wants to make it clear that the prophets did not literally receive some supernatural communication from an anthropomorphic deity such as the God that is portrayed in the Bible. This would be in keeping neither with the true nature of God nor the true basis of prophecy. Prophecy is a perfectly natural, albeit unusual, phenomenon and arises from the excellence of certain human faculties. Again, here we find Spinoza and Maimonides in clear agreement: Prophecy is nothing but the perfection through natural development of certain native human faculties. There is no miracle or other act of grace by God involved, there is nothing that cannot be completely explained by natural causes (although Maimonides' allowance of the possibility of miraculous divine intervention to prevent prophecy remains an important difference between the two thinkers, since this would be a miraculous divine intervention). To be sure, Spinoza's naturalization of prophecy does not need a Maimonidean explanation, given the naturalization of *all* phenomena within his general metaphysical scheme. However, the particular way in which Biblical prophecy is seen by Spinoza to arise out of an extreme but perfectly natural development of a faculty present in all human beings—the imagination—and to do so in people who have also naturally developed supreme virtue of character seems to point directly to Maimonides' own naturalization of the prophetic vocation.[47]

Section 4

What I want to suggest with these very schematic remarks, then, is that Spinoza's account of prophecy is more deeply Maimonidean than has been recognized even by those scholars who have paid serious attention to the Maimonidean context both of the TTP in general and of Spinoza's discussion of this topic in particular.

It is true that prophecy points a way toward what Spinoza understands as salvation—that is, toward virtue, happiness and well-being in this world. Thus, the lessons of the prophets are of significant value. But they are directed primarily toward the masses, who—unlike the philosophically educated—are not capable of the more difficult intellectual path toward human flourishing. The more accessible and colorful narratives of the prophets will indeed help inspire people toward at least an external conformity to the demands of justice

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47   For a discussion contrasting Maimonides' naturalization of prophecy with Aquinas' supernatural view, see Altmann, Alexander. "Maimonides and Thomas Aquinas: Natural or Divine Prophecy?" *AJS Review* 3 (1978): 1–19.

and charity. In this way, their worth is strictly practical. The end of the prophetic writings, Spinoza insists, is obedience: getting people to observe proper ethical behavior. That same behavior can, to be sure, find a deeper and more stable foundation in rational knowledge, in a grasp of certain philosophical truths about God, nature, and human beings—above all, just those truths that are found in the ordered propositions of the *Ethics*. But while such deep understanding is not to be found in the Bible's prophetic texts, neither is it necessary for the success of those texts in motivating good behavior. Sometimes a few good fictional stories are more effective than a host of rigorously demonstrated philosophical truths.

Malebranche, Freedom, and the Divided Mind

Julie Walsh

Human freedom is an important concept for Nicolas Malebranche for two reasons. First, he is greatly concerned with training the mind to avoid error. This much is evident from the subtitle to his first and greatest work *The Search After Truth: Wherein Are Treated the Nature of Man's Mind and the Use He Must Make of It to Avoid Error in the Sciences* (hereafter *The Search*). Malebranche is concerned to describe the circumstances under which an affirmation or denial of the true or the good is justified. He holds the view that human beings are free to affirm or deny truths and pursue or avoid goods and that they often err due to the misuse of this freedom. *The Search* is the result of his work to both explain how error occurs and to offer guidance for how to avoid it. Second, Malebranche is concerned to illustrate that God is in no way the cause of human sin. In order to avoid the theologically unappealing position that God is the cause of moral evil, it is necessary to posit human freedom.

This dual importance of human freedom for Malebranche's system is evident in the opening words of *The Search*: "Error is the cause of men's misery; it is the sinister principle that has produced the evil in the world; it generates and maintains in our soul all the evils that afflict us, and we may hope for sound and genuine happiness only by seriously laboring to avoid it."[1] So far so good. But things quickly get complicated when later in *The Search* Malebranche introduces and defends occasionalism, the doctrine that states that God is the only efficient cause. Commentators in Malebranche's own time and since have remarked on the (at least prima facie) contradiction between human freedom and occasionalism. They have pressed Malebranche to solve the following

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1   Malebranche, Nicolas. *The Search after Truth and the Elucidations of the Search after Truth*. Translated & edited by Thomas M. Lennon and Paul J. Olscamp. Cambridge: Cambridge University Press, 1997, p. 1. The standard edition of Malebranche's work is: Malebranche, Nicolas. *Oeuvres complètes de Malebranche* (abbreviated OC). Edited by André Robinet. 1958–84. Paris: Vrin.

problem: how can human beings be the cause of anything, most of all sin, when God alone is causally efficacious? The solution offered by Malebranche is puzzling. He says that when human beings exercise their freedom, they produce nothing real.[2] At best this is a perplexing comment that needs unravelling. At worst, as many commentators have concluded, it is emblematic of Malebranche's view of human freedom as a whole—hopelessly confused and, in the end, a failure.[3]

In this paper I argue that according to Malebranche mental attention is the corrective to epistemic error and moral lapse and constitutes the essence of human freedom. Moreover, I show how this conception of human freedom is both morally significant and compatible with occasionalism. By attending to four distinctions made by Malebranche throughout his writings we can begin to understand first, what it means for human beings to exercise their freedom in a way that has some meaningful consequence, and second, how this meaningful consequence does not conflict with occasionalism. The distinctions are: mind/matter, nothing/real, moral/physical, union of the human mind with God/union of the human mind with the human body. By getting clear about how Malebranche sees the overlap between and interconnection among these distinctions we can get a better handle on the metaphysical nature of human freedom, the kind of power it confers on us, and what it entails. I will discuss each distinction in turn starting with Section 1, on the mind/matter distinction. This first pair will be analyzed by way of a comparison between extended things and thinking things introduced by Malebranche early in *The Search*. Taking note of where the comparison breaks down, and why, leads directly into Section 2, where I discuss the nothing/real distinction. This pair is discussed at length in the first Elucidation to *The Search*, the stated objective of which is to clarify what was written in the course of the comparison between mind and matter at the outset of *The Search*.[4] In Section 3, I analyze the moral/physical

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2 Malebranche, *The Search*, Elucidation I, pp. 549–50.

3 See, for instance, Kremer, Elmar. "Malebranche on Human Freedom." In *The Cambridge Companion to Malebranche*. Edited by Steven Nadler. Cambridge: Cambridge University Press, 2000, 190–219, p. 214; Church, R.W. *A Study in the Philosophy of Malebranche*. Port Washington, NY: Kennikat Press, 1970, first published, 1931. P. 114; Pyle, Andrew. *Malebranche*. London: Routledge, 2003. P. 237; Dreyfus, Ginette. *La Volonté selon Malebranche*. Paris: Vrin, 1958, pp. 386–7; Pessin, Andrew. "Malebranche's Doctrine of Freedom/Consent and the Incompleteness of God's Volitions." In *British Journal for the History of Philosophy*. 8(1), 2000: 21–53; McCracken, Charles. *Malebranche and British Philosophy*. Oxford: Clarendon Press, 1983. P. 109.

4 The Elucidations to *The Search* were published in 1678. The first three books of *The Search* appeared in 1674, books four-six appeared in 1675.

distinction, developed in Malebranche's final work *Réflexions sur la prémotion physique*, and suggest that this pair exactly parallels the nothing/real distinction. In Section 4, I suggest that the only way to fully understand what is at stake with these distinctions and what Malebranche is trying to do with them is by looking at them in relation to the most important distinction of them all—between the union of the mind and God/union of the mind and body. I conclude in Section 5, with a suggestion about how to understand the power we possess to unite our minds to God. This power does not conflict with occasionalism because it is neither an efficient cause nor does it produce any real effects. It does, nevertheless, have a meaningful role in our moral lives.

1   Mind/Matter

Malebranche is a Cartesian dualist. He readily adopts the view that there are only two basic types of created substance in our ontological system: mind and matter. In order to "examine the causes and the nature of our errors" his first task at the outset of *The Search* is to examine the nature and properties of the understanding and the will.[5] To get to the bottom of error we need to understand how we acquire knowledge and under what circumstances we can go wrong in the pursuit of this acquisition. Crucial to this endeavour is our understanding of the mind and its operations. Before getting to Malebranche's discussion of the operations of the mind, it is necessary to canvas the various ways he takes the human mind to acquire knowledge.

According to Malebranche there are four methods by which we can come to know something and each method takes a distinct object. First, we can know things by themselves. There is only one object of this kind of knowledge—God. We perceive God by a "direct and immediate perception." Second, we know some things by way of consciousness or inner sensation [*sentiment intérieur*]. By the inner sensation, we know only the existence of certain things: our existence, our own soul or mind,[6] the fact that we have freedom, and when we are feeling pain or pleasure.[7] Inner sensation, according to Malebranche, is infallible. It is infallible because it is direct—there is no representative idea involved. But this knowledge is also very limited. The inner sensation only gives us knowledge of "what we sense taking place in us" and it is only the existence of the things listed above that we perceive in this way, not their natures.

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5   Malebranche, *The Search*, pp. 1–2.
6   Malebranche uses these terms interchangeably.
7   Malebranche, *The Search*, p. 239.

Neither the direct perception of God nor the information we receive by way of inner sensation involve ideas. The third way we know things is the way that we perceive the vast majority of the time—by ideas. This is how we know bodies and more abstract things like universals, ideas of perfection, and geometrical figures. We come to perceive ideas by what Malebranche calls the vision of all things in God.[8] According to this view, God contains all ideas in an intelligible way and human beings access ideas through Him.[9] Our knowledge of things through their ideas is more perfect than our knowledge of things by inner sensation in the sense that it is more complete. Our knowledge of bodies and their properties is perfect in virtue of their ideas being located in God. The trade-off is that the knowledge we have by inner sensation is never false whereas we are liable to make errors in our judgments about the nature, properties, and qualities of bodies and how they relate to one another.[10] Finally, it is by conjecture that we know other minds.[11]

So, for Malebranche, we know the *existence* of our mind more distinctly than the existence of both our own body and those surrounding us, but our knowledge of the soul's *nature* is not as perfect as our knowledge of the nature

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8   Malebranche arrives at the vision of all things in God by an argument by elimination. He canvasses various other possible ways that we acquire ideas and rejects them: "That material objects do not transmit species resembling them . . . That the soul does not have the power to produce ideas . . . That we do not perceive objects by means of ideas created with us. That God does not produce ideas in us each time we need them . . . That the mind sees neither the essence nor the existence of objects by considering its own perfections." (*The Search*, pp. 220–30).

9   Malebranche, *The Search*, p. 237. Malebranche makes the following comparison: "God is the intelligible world or the place of minds, as the material world is the place of bodies." *The Search*, p. 235. See also Malebranche's *Conversations chrétiennes*. Edited by André Robinet. Paris: Vrin, 1959; OC4, Entretien IV, pp. 94–5. Malebranche's claim that God contains intelligible extension was the source of charges of Spinozism. In short, if intelligible extension exists in God, this is very nearly saying that material things are God, or are in God in some way. Malebranche responds, with questionable success, that there is a difference between created and intelligible extension. For edifying accounts of Malebranche's responses to such criticism, see Radner, Daisie. *Malebranche: A Study of a Cartesian System*. Amsterdam: Van Gorcum Assen, 1978. Pp. 111–8; and Brown, Stuart. "The Critical Reception of Malebranche, from His Own Time to the End of the Eighteenth Century." In The *Cambridge Companion to Malebranche*. Edited by Steven Nadler. Cambridge: Cambridge University Press, 2000. Pp. 262–87, 274–5.

10   Malebranche, *The Search*, pp. 82–4.

11   Malebranche, *The Search*, pp. 236–40. For more on Malebranche's view of knowledge of other minds see his *Entretiens sur la métaphysique et sur la religion*. Edited by André Robinet. Paris: Vrin, 1965; OC12, Entretien IV.

of bodies.[12] Despite our inability to know the nature of the mind, Malebranche acknowledges the need to discuss the operations of the mind as a first step to elucidating the ways in which human beings can avoid error. His strategy for this is to compare that whose nature we know the least, mind, with that whose nature we know the best, matter. The properties that belong to matter, says Malebranche, "being more easily imagined will make the notions properly attached to the words *understanding* and *will* more distinct and even more familiar."[13] The comparison is set up as follows: matter has two properties: 1) receiving different figures and 2) the capacity for motion. The mind has two properties: 1) the understanding which receives various ideas and 2) the will which receives inclinations. Receiving figures is compared with the understanding, the capacity for motion with receiving inclinations.[14]

1.1   *Figure and Understanding*

Within the comparison between figure and understanding, a further distinction is carved. Malebranche states that matter admits of two types of figures: external figures, like roundness, and internal figures, which characterize the kind of particles that compose an object. These two kinds of figures correspond to two kinds of perceptions of the soul—pure perceptions and sensible perceptions. The objects of pure perception are ideas of spiritual things, universals, a perfect circle, a chiliagon, etc. This category of perceptions is called pure because the mind can perceive these ideas without forming a corporeal image in the brain.[15] Malebranche states that pure perceptions are superficial to the soul because they do not make an impression on or sensibly modify the soul. The objects of sensible perceptions, by contrast, make vivid impressions on the soul. When we perceive something sensible, "two things are found in our perception: *sensation* and pure *idea*." God joins sensations to pure ideas when objects are present to us so "we may believe them to be present and that

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12   Malebranche anticipates the question of why God would deny human beings knowledge of the nature of the mind. In short, he suggests that if we had knowledge of the nature of our minds, we would be too inclined to view the soul as separate from the body—thus interfering with the mind-body union. See *The Search*, p. 239.

13   Malebranche, *The Search*, p. 2.

14   In a recent paper Claire Schwartz gives a straightforward exposition of both the importance and limits of this comparison for Malebranche's explanation of the mind. See her "L'activité sans causalité du sujet malebranchiste." *Revue Philosophique de Louvain*. 107(4), 2009: 607–35.

15   Malebranche, *The Search*, pp. 16–7, 198.

we may have all the feelings and passions that we should have in relation to them."[16]

Malebranche states that external figure is to matter as pure perception is to the mind. The external figure of a piece of wax, for instance, might be round. After being warmed for a period, the wax can be reshaped into a square. The change in external figure is a change, but does not *fundamentally* alter that piece of matter—it is still wax. Similarly, pure perceptions do not modify the mind. Malebranche says that pure perception is an intellectual perception—while sensory perceptions have a great impact on us, intellectual ones are much subtler.[17] He concludes this branch of the comparison by saying that "pure perceptions are to the soul roughly what figures are to matter."[18] He has told us that pure perceptions do not modify the soul—and because a change in figure does modify a body, the comparison is, as he says, rough.

In the second half of the figure/understanding comparison Malebranche compares internal figure with sensory perceptions. He calls internal figure 'configuration' which, he says, is necessary to all the parts of an object for it to be what it is.[19] For example, suppose that the configuration of a piece of wax reveals at the microscopic level to be made of triangular particles. If we were able to change the shape of the particles from triangular to rectangular, the piece of wax would be fundamentally changed and would no longer be a piece of wax. Malebranche states that the kind of fundamental change that a body undergoes when its configuration changes, as when wax turns into fire and smoke, is comparable to the change in the soul when it changes from experiencing pleasure to experiencing pain. So he states that "configurations are to matter roughly what sensations are to the soul."[20]

Despite being inexact, there is one obvious and important point to be drawn from the comparison. Malebranche is highlighting the fact that figure and understanding share one central feature—utter passivity. Just as matter performs no action in receiving different figures and configurations, so too the

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16   Malebranche, *The Search*, p. 234. Presumably, it is the presence of sensation that prompts the formation of a corporeal image in the brain, which is absent in pure perception. Malebranche's view of ideas is complicated. For a clear account of his view with an emphasis on the parallel roles of the vision of all things in God for epistemology and occasionalism for physics see Nadler, Steven. *Malebranche and Ideas*. New York & Oxford: Oxford University Press, 1992.

17   Malebranche, Nicolas. *Recueil de toutes les réponses à Monsieur Arnauld*. Edited by André Robinet. Paris: Vrin, 1966; OC9, p. 999.

18   Malebranche, *The Search*, p. 4.

19   Malebranche, *The Search*, p. 2.

20   Malebranche, *The Search*, p. 4.

faculty of receiving different ideas and modifications in the mind is entirely passive. This is not controversial. When extended bodies change their figures, they are being acted upon. Likewise, in perceiving, our sensory organs are acted upon by objects external to us. Things become less straightforward, but more interesting, when motion is compared with the will.

1.2   *Motion and Will*

Malebranche defines the will in terms of motion. He says "I propose to designate by the word WILL, or capacity the soul has of loving different goods, *the impression or natural impulse that carries us toward general and indeterminate good*."[21] He gives pride of place to motion in both the material and spiritual worlds. He states that when creating the world, if God had produced infinitely extended matter without injecting any motion into the system, there would be no differentiation among bodies. While God's grandeur would be evidenced by the great expanse of matter, there would be no variety among bodies and hence no beauty. We would thus have no reason to admire the infinite wisdom of the creator. Malebranche says that that the motions of the mind, inclinations, are to the spiritual world what motion is to the material world. If there were minds without inclinations, not only would there be no beauty and no reason to admire God's wisdom, but there would also be no opportunity to see his "mercy, justice, goodness, and generally all His other attributes."[22] The motion of extended bodies and the motion of the will have more in common too—not only do they both have God as their cause, but God creates both kinds of motion as proceeding in a straight line unless perturbed by something external to them. Bodies will follow a straight path of movement barring interference of other bodies. The inclinations of the mind follow a straight path towards "the possession of good and truth" unless some external cause interrupts that line and diverts the impression "towards evil ends."[23]

But there are two important differences between the inclinations of the will and the motions of material bodies that strain this comparison. First, Malebranche uses the French word *droite* to describe the unperturbed motion of both extended bodies and the inclinations of the will. Wordplay is suggested by the use of the *droite*, which can also be seen in the English translation 'straight'. While the motion of extended bodies and the motion of the will are both straight in the sense that they follow a linear path unless perturbed, it seems Malebranche invokes an additional connotation of the word

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21   Malebranche, *The Search*, p. 5.
22   Malebranche, *The Search*, p. 265.
23   Malebranche, *The Search*, p. 4.

in describing the will. The motion of the will is unlike the motion of extended bodies in that its motion is not only straight in a linear sense—which is to say that, if undisturbed, it aims toward God—but also that it is right, correct, lawful, and honest. This indicates that there is a moral component for the movement of mind that is absent in the corporeal realm.

A second difference between the motion of bodies and the motion of the will is that while bodies are utterly passive with respect to the direction and speed of their motion, Malebranche states that the will can "in a sense be said to be active, because our soul can direct in various ways the inclination or impression that God gives it." He explains: "For although it cannot arrest this impression, it can in a sense turn it in the direction that pleases it, and thus cause all the disorder found in its inclinations, and the miseries that are the certain and necessary result of sin." And indeed, this is how Malebranche defines human freedom: "by FREEDOM, I mean nothing else but *the power that the mind has of turning this impression* [the impression towards the general good] *toward objects that please us so that our natural inclinations are made to settle upon some particular object*.[24]

This definition is far from the more standard notion that takes human freedom to stem from the freedom of the faculty of willing. Where it is possible to will against what one takes to be true or good, the standard account might go, there too is human freedom. This is not Malebranche's view. He instead defines freedom as a power to direct the God-given impression, which naturally tends towards the general good, in the direction of objects that are pleasing. Turning away from the pleasure of truth or the pleasure of the good, for Malebranche, would be no power at all. Pleasure, on his account, is our only guide to the true and the good. Indeed, Malebranche identifies pleasure as the unique motive for the 'turning' of the will. The will is a capacity to love—and freedom is cast in terms of directing the God-given impression towards things that are pleasing. Now, not all things are worthy of our love. In fact, for Malebranche, God alone is worthy of our love. Because we are naturally led to love all things that are pleasing, our freedom has to do with somehow directing our natural desire for pleasure towards the one thing that deserves it—God.[25] This directing cannot

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24   Malebranche, *The Search*, pp. 4–5. It is worth mentioning here that Malebranche's language of 'turning' and 'directing' imply causal activity of the soul. This is a problem, of course, because this kind of language seems to undercut his commitment to occasionalism. We must remember, however, that Malebranche's discussion of these terms is in the context of the comparison—and, as we'll see below, it is difficult, though perhaps not impossible, to describe the 'activity' of human freedom in non-physical language.

25   More on this in Section 4.

be the result of the will's rejection of a presently felt earthly pleasure in favour of its pursuit of a distant, infinite one, for the will is always determined by what is most pleasing.[26] Instead, the directing has to do with coming to perceive the distant, infinite good as that which is most pleasurable. The contribution of the understanding to this endeavour is critical because, for Malebranche, the will is a "blind power."[27] In order for the will to be directed towards a particular object, two things need to happen. First, the object needs to be perceived and second, the object needs to be pleasing. Because the will is blind, input from the understanding is a necessary condition for volition. As Malebranche writes "the will can direct both the impression it has for good and all its natural inclinations in various ways, only by ordering the understanding to represent to it some particular object."[28] This immediately calls for further clarification. In his definition of freedom Malebranche states that it is the *mind* that has the power to turn the impression, not the will. In the phrase just quoted above, it looks like Malebranche is conferring the power of 'ordering the understanding' on the will. Although he is not always careful to emphasize it, Malebranche takes the mind to be a wholly indivisible substance.[29] While it is convenient to speak of the mind as having different faculties, the mind as whole perceives, desires, etc.

At the end of this analysis of the not entirely appropriate comparison, we are left with the following information: 1) the mind is passive with respect to every kind of perception it receives, 2) God is the cause of all of the mind's desires and inclinations and so the mind is also passive with respect to all of its inclinations and desires. We know that mind and matter are two distinct substances, but Malebranche has yet to provide an explanation of how the mind is *unlike* matter in its activity. Recall the two differences between the motion of bodies and the motion of the will noted above. At least at first blush the will being "in a sense" active seems to be the greater difference. But now we have seen Malebranche clarify that the will does not actively do anything, but is rather a vehicle for God-given impulses. At the moment, the only difference

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26   See, for instance, *The Search*, Elucidation 1, p. 550. "Now principally what makes us sin is that since we prefer enjoying things to examining them (on account of the pleasure we feel in enjoying them and the pain we feel in examining them), we cease using the impulse given to us for seeking out and examining the good and we stop at the enjoyment of things we ought only to use."

27   Malebranche, *The Search*, p. 5.

28   Malebranche, *The Search*, p. 5.

29   Malebranche, *The Search*, p. 2.

between mind and matter, at least according to the comparison, is that the mind's movement has a moral character in that it is directed towards the good in general—to God. But we have yet to see any explanation of how exactly the mind is able to have an effect on its own motions. It is to address this gap that Malebranche adds an Elucidation to *The Search* in order to clarify the conclusions of the comparison. In the first Elucidation Malebranche revisits his comparison, stating that certain people thought he gave up his comparison between mind and matter too soon. They say that after reading Malebranche's explanation of the similarities and differences between mind and matter, they could see no explanation for how the mind is any more capable than matter of determining the impression given to it by God.[30] This raises the worry of attributing sin to God. In this elaboration on his comparison Malebranche introduces a new and useful distinction—nothing/real.

2   Nothing/Real

In an effort to preserve human freedom and avoid the unfortunate consequence of having God appear to be the author of sin, Malebranche introduces the terminology of doing something 'real,' which he opposes to doing 'nothing.' In short, only God does things that qualify as real. Our 'acts' are considered nothing. To explain this, Malebranche first outlines the real acts committed by God when we sin: (1) God impels us towards the good in general by the natural impression, 2) He gives us the sensation of a particular good, and 3) He leads us towards this particular good. God leads us towards particular goods for two reasons. First, because God leads us to the good in general, we are, as a consequence, also led to particular goods.[31] Second, being led to particular goods is important for the preservation of the mind/body union. Pleasurable sensations mark those things that are likely to be good for our bodies.[32] The mechanism goes like this: in virtue of having this inherent impression towards the good, we constantly experience the desire for the good. When we perceive an object, by the vision of all things in God, God is the cause of our perception. If that object seems pleasurable to us, it is because God has set things up in such a way that things that are potentially good for us promise pleasure and we

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30   Malebranche, *The Search*, Elucidation 1, p. 547.

31   Malebranche, *The Search*, Elucidation 1, pp. 547–8.

32   Malebranche, *The Search*, pp. 20–1.

are motivated by pleasure.[33] Malebranche states that "[t]his is all God does in us when we sin."[34] We must wonder—what is left for us to do?

The answer lies in the fact that according to Malebranche, in step 3 above, God does not *invincibly* lead us to particular goods. On his view, when we perceive a particular good it is impossible for us to truly believe that it is representative of the true good. As a result of this impossibility we "feel free to halt this love, that we have an impulse to go farther." In other words, we do not feel that the impression towards the general good is constrained by this particular good. Though both the sinner and the saint "feel free to halt" the love of a particular good, the sinner "stops, he rests, he does not follow God's impression—he does nothing, for sin is nothing."[35] Here we see the contrast between the real and the nothing. What God does is real in that it has a sensible effect. He causes us to have impressions and perceptions, in short, modifications. But what the sinner does is nothing—he stops at loving a particular good when no necessity compels him.[36] It is important to note here that the sin lies not in *using* a particular good, but rather in *loving* it. Malebranche is not advocating that we must not use goods—for certainly things like food and drink are goods that promise pleasure and we must frequently enjoy those. The prohibition is against loving those particular goods as though they are the cause of our pleasure. Because God is the only real cause, and thus the only real cause of our pleasure and pain, He is the only appropriate recipient of our love.

Now, we might accept this explanation for what the sinner does. The sinner does not notice that the presently considered particular good does not fill up the desire for the good in general. The sinner allows himself to be carried along by his desire and so loves that which is not the true cause of his pleasure. But in this case it seems that the sinner is really no different from a moving material

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33   Malebranche explains the fact that we are motivated by pleasure in the context of how the human union with God changed with original sin. The difference between Adam and postlapsarian humans is frequently discussed by Malebranche. See *The Search*, pp. 21–3; *Entretiens sur la métaphysique et sur la religion*, OC12, Entretien IV, sec. xix; p. 103; Entretien XII, sec. xiv; p. 295; *Traité de morale*, ed. Michel Adam. Paris: Vrin, p. 166, OC11, Pt. 1, ch. x, sec. xv; p. 122; *Conversations chrétiennes*, OC4, Entretien II, pp. 40–1 and Entretien IX, p. 188; *Traité de la nature et de la grâce*. Edited by Ginette Dreyfus. Paris: Vrin, 1958, OC5, Disc. 2, Pt. 1, sec. xxxiv; p. 101, Disc. 3, Pt. 1, sec. ix; p. 123.

34   Malebranche, *The Search*, Elucidation 1, pp. 548, 550–1.

35   Malebranche, *The Search*, Elucidation 1, p. 548.

36   Later in this Elucidation (p. 551) Malebranche puts the point like this: "And what do we do when we sin? Nothing. We love a false good that God does not make us love through an invincible impression. We give up seeking the true good and frustrate the impulse God impresses on us. All we do is stop and rest."

object. Take a pinball that is propelled by a plunger onto the playfield. The pinball will move downward toward the drain unless it is struck by various other objects in the playfield. Malebranche's description of the sinner can be seen as similar to the pinball. Because the sinner chooses to do nothing, though he is propelled to move in a certain direction, towards the good in general, his movement is manipulated by things external to him. But even if this is the case for the sinner, it seems as though the virtuous person, the person who does not allow their movement towards the good in general to be perturbed by external objects, must do *something* rather than nothing. If not, then it seems that both sinners and saints respectively merit their moral disapprobation and approbation for doing the same thing—nothing at all.

Because particular goods do not compel our love, we are able to suspend our consent to them and examine the relative goodness of the object under consideration. Malebranche states that the virtuous person, instead of stopping and resting with a particular pleasing good, "through the impression God gives him for the good in general . . . think[s] about goods other than the one he is enjoying."[37] This suggestion is immediately difficult to accept. Malebranche has already argued for the vision of all things in God and stated that God is the cause of all of our perceptions. It is hard to see how we could cause a new idea to come into our minds without compromising the commitment to occasionalism. He goes on to ask: "What, then, do we do when we do not sin? We do everything that God does in us, for we do not limit to a particular good, or, rather, to a false good, the love that God impresses in us for the true good."[38] It seems, then, that when we, through the impression towards the good in the general, think about goods other than the one presently enjoyed we are doing everything that God does in us. But what does that mean? The notion of 'doing what God does in us' is featured prominently in Malebranche's last work where it is aligned with yet another distinction.

3 Moral/Physical

Malebranche was motivated to write his final book, *Réflexions sur la prémotion physique*, as a response to the work by the abbé Laurent-François Boursier *De l'action de Dieu sur les créatures, dans lequel on prouve la prémotion physique par*

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37   Malebranche, *The Search*, Elucidation I, p. 548.
38   Malebranche, *The Search*, Elucidation I, p. 551.

le raisonnement.[39] In short, Boursier argues that God is the cause of a *prémotion physique* that precedes and necessarily determines all human volitions.[40] A consequence of this position is the impossibility of resisting grace. For Malebranche, to hold this kind of view is tantamount to destroying human freedom. In *Réflexions sur la prémotion physique* he repeatedly states Boursier's big mistake—the confusion of the moral with the physical. In other words, a confusion between what God does independent of us, in us without us [*en nous sans nous*] and what He does in collaboration with us, in us with us [*en nous avec nous*].[41]

The physical and the moral represent two different powers or activities within the soul. The physical activity of the soul is God's action within it. God's action is characterized by 1) our invincible and ceaseless desire to be happy, 2) our natural desire for those things that seem pleasurable to us, and 3) all of our perceptions.[42] Notice that this list exactly parallels the list given by Malebranche in the first Elucidation to *The Search* of 'real' things that God does in us when we sin. It seems, then, that the real and the physical are one and the same category for Malebranche.

Recall that the first Elucidation is where Malebranche advances the distinction between doing something 'real' and doing 'nothing'. It seems that we can conclude that the group of physical things, things God does in us without us, is identical to the group of real things. Likewise, the 'nothings' must be the, as it

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39   Boursier's work appeared in 1713. The *Réflexions sur la prémotion physique* was published in 1715. In December of 1713 Malebranche writes to D. de Mairan: "On croit que je suis obligé de répondre à un livre qui attaque mes sentimens sur la grace et qui fait beaucoup de bruit." ("It is believed that I am obliged to respond to a book that attacks my views on grace and that is making a lot of noise.") (*Réflexions sur la prémotion physique*. Edited by André Robinet. Paris: Vrin, 1959, OC16, v.).

40   Andrew Pyle gives a clear explanation of Boursier's basis for holding this position. He says "Boursier's argument for this theory turns on the metaphysical doctrine of continuous creation. God recreates every soul, he argues, with a complete and determinate set of modes. But the act of consent to the operation of grace is a mode of the soul. Therefore it too falls under the scope of continuous creation" (*Malebranche*, p. 230). Malebranche himself addresses this point in *Réflexions sur la prémotion physique*, OC16, pp. 7–8.

41   Malebranche, *Réflexions sur la prémotion physique*, OC16, pp. 39–40. Malebranche discusses this distinction at length in *Conversations chrétiennes*, OC4, Entretien VIII, pp. 167–87. He also uses this terminology in his discussions with Arnauld. See *Recueil de toutes les réponses à Monsieur Arnauld*. Edited by André Robinet. Paris: Vrin, 1966, OC6, p. 352. It is also mentioned in *Entretiens sur la métaphysique et sur la religion*, OC12, Entretien XI, sec. iv; pp. 255–6; *Méditations chrétiennes et métaphysiques*. Edited by Henri Gouhier & André Robinet. Paris: Vrin, 1959, OC10, Méditation VII, p. 79.

42   Malebranche, *Réflexions sur la prémotion physique*, OC16, pp. 4–5.

were, content of the moral. In *Réflexions sur la prémotion physique* Malebranche states that he has always held that the soul is the cause of its own distinct kind of acts—its consentings that are morally good or bad depending on whether they conform or are contrary to the eternal law.[43] But the soul produces nothing physical.[44] We are now in a position to draw some conclusions about the relationship among the distinctions we have seen so far. Causal acts of God and their effects are both 'real' and 'physical.' The acts qualify as real because they are efficient causes. Their effects are physical modifications. Notice that the modifications consequent to real acts will be in both sides of the mind/matter distinction. God is the real cause of all the figures and motions that characterize material bodies, but God is also the real cause of all our inclinations and our perceptions. Because our inclinations and perceptions sensibly modify the mind, they are real effects. These modifications, whether of the mind or of material bodies, are governed by God under the causal system of occasionalism. So we know that the mind/matter distinction exactly parallels neither the nothing/real nor the moral/physical. There are aspects of the mind that fall on the side of the real and the physical. But there must still be a part of the mind that is a candidate for membership within the 'nothing' and the 'moral'.

Malebranche states that the moral activity of the soul grounds the essence of freedom and is very different from its physical counterpart. It is a power not to produce new modifications by its own efficacy, but rather to suspend or give its consent to motions that follow naturally from the perception of an apparent good. Malebranche reiterates what he says in the first Elucidation of *The Search*, that this power is a consequence of our constant desire for the good in general, which means that we are never invincibly or necessarily moved to love a particular good. He goes on to say that the love of the good in general, the love of beatitude, is natural and necessary. It is not free. Freedom lies in the soul's ability to choose the means to reach its end.[45] When we have cause to worry about loving something that does not deserve our love, we are free to suspend our consent. And, in fact, the inner sensation always reminds us of our freedom in the presence of particular goods because we feel free with respect to them. Here is how Malebranche definitively describes the moral power:

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43   Malebranche, *Réflexions sur la prémotion physique*, OC16, pp. 42–6.

44   Malebranche is careful to note that even though the soul is not the cause of any modifications, it often happens that there are changes in the mind and/or the body that follow an act of the soul. But these modifications are caused by God in accordance with the eternal laws that dictate reward and punishment for certain acts.

45   Malebranche, *Réflexions sur la prémotion physique*, OC16, p. 47. "Mais l'ame est libre dans le choix des moyens de parvenir à sa fin."

"The non-invincibility that is found in the motions, or natural determinations of the will, is the cause of the real and actual power of the will, that wants to be happy, to suspend its consent."[46] This is supposed to be what God does *in us with us*.

Recall above that in the first Elucidation of *The Search* Malebranche states that when we do not sin we simply do everything that God does in us. In that text, the distinction under discussion was nothing/real. We were interested to know how to understand the role of 'nothing' in that context. In other words, what does it mean to do 'nothing' when we do all that God does in us? I suggest that we take Malebranche to mean literally 'no thing'. Our 'doing all that God does in us' is not doing any thing because what *we* are doing is not a real cause—it is not a thing. Nor is it a thing in the sense of having any real or physical effect. Doing all that God does in us must be evaluated in different terms entirely—the moral. It seems, then, that the moral and the 'nothing' are to be identified as the same category. Above I noted that the mind/matter distinction does not exactly parallel those of nothing/real and moral/physical for much of the mind's contents are physical results of real effects. The category of the nothing or the moral is much narrower than the mind as a whole. We know that the moral can only reside in the mind, but we have yet to determine just what we contribute to the behaviour that characterizes the moral. Thus far we have seen Malebranche state that this behaviour amounts to following the natural impression towards the general good in favour of resting with a particular good, suspending our consent to the particular good, willing to think of things other than the good presently under enjoyment.[47] The key to understanding exactly what Malebranche takes this behaviour to consist in is found in the role he ascribes to attention. And in order to understand how attention works, we must move to the next and final distinction.

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46   Malebranche, *Réflexions sur la prémotion physique*, OC16, p. 47. Unless otherwise stated, all translations my own.

47   I take Malebranche to be working out one consistent view of human freedom throughout his corpus. In a recent paper Tad Schmaltz advances a developmental view of Malebranche's position stating that Malebranche changes his mind on the topic of human freedom throughout his career. In my view, to support his position Schmaltz needs to lean a little too heavily on strictly literal interpretations of the seemingly causal language Malebranche uses to describe some behaviours of the mind. Though the causal terms are present (the will can 'turn' and 'direct' impressions, etc.) I think that Malebranche's discussion surrounding their use clarifies his meaning. For Schmaltz's argument see Schmaltz, Tad. "Malebranche on Natural and Free Loves." In *The Concept of Love in 17th and 18th Century Philosophy*. Edited by Gábor Boros, Herman De Dijn, & Martin Moors. Leuven: Leuven University Press, 2007, pp. 95–111, especially pp. 104–11.

4   Mind and God/Mind and Body

Discussion of the ways the human relationship with God was changed when Adam sinned is present in almost every Malebranchean text.[48] Though it is not always explicitly cast in these terms, the story of original sin grounds the distinction we will presently consider—the relationship between the human mind and God on the one hand and between the human mind and the human body on the other. Malebranche's discussion of Adam's sin in *The Search* is representative.

Adam, like us, was composed of a mind and body. Because we are composed of these two distinct parts, we seek two distinct kinds of goods—goods for the mind and goods for the body. And we have two different ways of recognizing these goods. The goods of the mind are identified by the mind alone. The goods of the body are identified by the mind in cooperation with the body. The object of the former is clear and evident knowledge. The object of the latter is confused sensation.[49] Malebranche states that the mind must not occupy itself with the goods of the body for only God deserves the attention of the mind. God leads us towards things that are good for the body by pleasure, and has us avoid things that are bad for the body through pain. In other words, we move towards or away from objects by instinct because they do not deserve the attention of the mind. By contrast, God does deserve the attention of our minds. And God demands to be loved by something other than instinct— by choice.[50]

Adam also had the same senses that we do. His senses alerted him to which things were good and which things were bad for him in his environment. The difference between Adam and us is that the signals from his senses were not distractions to him—his contemplation of God and His perfections went

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48   See: *The Search*, pp. 19–23; *Conversations chrétiennes*, OC4, Entretien IV, p. 97; *Traité de la nature et de la grâce*. Edited by Ginette Dreyfus. Paris: Vrin, 1958, OC5, Pt. II, ch. xxxiv, p. 101; *Recueil de toutes les réponses à Monsieur Arnauld*, OC6–9, pp. 358–63, 586, 765, 959; *Méditations chrétiennes et métaphysiques*, OC10, Méditation XII, ch. xiii–xiv, p. 145; *Traité de morale*, OC11, Pt. I, ch. III, sec. xviii–xx; pp. 49–50; *Entretiens sur la métaphysique et sur la religion*, OC12, Entretien XII, sec. xiv; p. 295; *Entretiens sur la mort*. Edited by André Robinet. Paris: Vrin, 1965, OC13, Entretien II, p. 386; *Traité de l'amour de Dieu*. Edited by André Robinet. Paris: Vrin, 1963, OC14, p. 26; *Réflexions sur la prémotion physique*, OC16, pp. 24–5.

49   Malebranche, *The Search*, p. 21. "I realize through reason that justice ought to be esteemed; I also know through the sense of taste that a given fruit is good. The beauty of justice is not sensed; the goodness of fruit is not known."

50   Malebranche, *The Search*, p. 21.

undisturbed in the presence of the flow of sensory information. His senses played an advisory role only and, according to Malebranche, Adam was even able to stop the motions in his body once they had performed their advisory function.[51] The consequence of original sin is a reversal in power between the mind and the body. Whereas Adam's mind could control his senses, the minds of postlapsarians are controlled by the senses. Malebranche claims that the senses themselves did not change after sin; it is the mind that changed. And this change in the mind resulted in a much weaker ability to control the senses. This weakness is a result of the distance created between the mind of human beings and the mind of God when Adam sinned. Before that moment minds "received from Him that enlightenment and strength by means of which they had preserved their freedom and happiness."[52] Prelapsarians had a power over their bodies that allowed them to remain totally focused on God. Malebranche takes their freedom to be complete because their knowledge of their union with God was sufficient to have their actions motivated by the true good. No intervening motive of pleasure was necessary.

Original sin, then, changed the nature of the human mind's relationship to God and to its body. Adam's mind was so closely united to God that he had direct and immediate knowledge of God and his own good. Presumably the reason his mind was able to control his body in the way that it did was that it was in possession of this direct knowledge. Adam was not confused about the significance of his ideas. Furthermore, his perfectly subordinated senses never impeded his reasoning.[53] Once that knowledge was lost, the mind's reasoning powers were interrupted and corrupted by the effects of the senses. Despite this grave impediment, Malebranche still thinks that it is possible for human beings to be virtuous and to love only God notwithstanding the pleasure promised to us by finite things. I want to suggest here that human freedom, for Malebranche, amounts to the mind attending to its relation with God rather than attending to its relation to its body. In other words, the 'activity' of the moral that produces 'no thing' is the mind's focus on its relationship with God and turning away from its relationship with its body.

Given the state of postlapsarian humans, the focus on the relationship with the body seems to be the default position. Malebranche states that

> since we can love only objects that we can think about, and since we presently cannot think about objects other than those which cause exceed-

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51   Malebranche, *The Search*, p. 22.

52   Malebranche, *The Search*, p. 22.

53   Malebranche, *Entretiens sur la métaphysique et sur la religion*, oc12, Entretien iv, sec. xx; p. 105.

ingly lively sensations in us, it is clear that our dependence on the body diminishes our freedom and in many cases even prevents its use altogether. Therefore, since (1) our sensations obliterate our ideas, and since (2) our union with the body (by which we perceive what is related to it) weakens our union with God (by which all things are present to us), the mind must not let itself be divided by confused sensations if it wants to preserve the principle of its determinations as perfectly free.[54]

The way to avoid our mind being divided is by attention. Malebranche variously describes attention as 1) "the natural prayer by which we make it such that God enlightens us",[55] 2) an act of freedom,[56] 3) a desire to turn towards God,[57] and 4) an effort to distance oneself from the sensible and turn toward the intelligible.[58] Malebranche states that attention amounts to a prayer to God for enlightenment, that is, ideas. This act is the essence of human freedom. This act also characterizes the desire to focus on God and turn away from material things, including one's own body and its sensations. This prayer of attention, according to Malebranche is, by a law of nature, always rewarded by the grace of light [*lumière*].[59] When we attend, we receive new ideas. This is because, in accordance with a natural law, our attention is an occasional cause for being illuminated with new ideas. Malebranche states that it is a rule of nature that human beings discover the truth in proportion to their application to the truth. Paying attention is applying oneself to the truth. This is a difficult task, for since original sin "our body now troubles our ideas, and speaks so loudly in favour of the goods that it perceives, that the soul only rarely interrogates it, and only distractedly listens to its internal truths."[60]

   Though difficult, it is nevertheless possible. And the effect is remarkable—the stronger our attention the clearer and more immediate the idea presented to us. What's more, the sensations felt by the body diminish in their intensity.[61] What makes attention possible is the vision of all things in God, the foundation of which is the union of the mind with God. As Malebranche says "If we

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54   Malebranche, *The Search*, Elucidation I, p. 549.

55   Malebranche, *Traité de la nature et de la grâce*, OC5, Disc. 2, Pt. 2, sec. xxxvi; p. 102.

56   Malebranche, *Entretiens sur la métaphysique et sur la religion*, OC12, Entretien XII, sec. x; p. 289; *Traité de morale*, OC11, Pt. 1, ch. 5, sec. iv; p. 60.

57   Malebranche, *Méditations chrétiennes*, OC10, Meditation III, sec.x–xiii; pp. 30–1.

58   Malebranche, *Traité de morale*, OC11, Pt. 1, ch. 5, sec. xviii; p. 61.

59   Malebranche, *Méditations chrétiennes*, OC10, Meditation III, pp. 13, 17; 30, 140, 198; *Traité de Morale*, OC11, Pt. 1, ch. 5, sec. iv; p. 60. The various descriptions of attention are discussed in Gueroult, Martial. *Malebranche*. Vol.III. Paris: Aubier, 1959. P. 162.

60   Malebranche, *Traité de la nature et de la grâce*, OC5, Disc.2, Pt. 2, sec. xxxviii; p. 103.

61   Malebranche, *The Search*, Elucidation II, p. 559.

did not have within us the idea of the infinite, and if we did not see everything through the natural union of our soul with infinite and universal Reason, we would not be free to think about all things . . . man is stripped of his freedom to think about all things if his mind is severed from Him who contains all things."[62] Now, the vision of all things in God is the mode by which we receive ideas and we know that our reception of ideas is passive. Above we saw that perception falls on the side of the 'real' and the 'physical' because God's efficient causal power grants us ideas and the ideas are modifications of our minds. We also saw that for Malebranche when we do not sin, we do all that God does in us. He also said that the moral is characterized by what God does *in us with us*. But if attending is desiring new ideas and both our desires and our ideas are caused by God, it seems that we still have not answered the important question of what we contribute to our own acts of freedom. Let us turn to that now.

5   Uniting the Divided Mind

For Malebranche it is a fact of human life that God is the cause of all our inclinations and perceptions. As we saw above there are three things that God does in us without us: He 1) invincibly impels us towards the good in general, 2) represents a particular good to us, that is, gives us the sensation of a particular good, and 3) leads us towards particular goods, but not invincibly or necessarily. God creates us with a will that strives continually for the good. Through the vision of all things in God He gives us ideas. By the laws of the union of mind and body He makes it such that we feel certain sensations when objects are present to us. Over these things we have no control. But where we do have control is taking advantage of the noninvincibility with which God leads us to particular goods. Because we are all created under the same circumstances, we are all equal candidates for avoiding the error of taking our inclinations to be invincible.

In order to hold human beings responsible for their moral character, we need something over which we have control. For there must be some difference between the person who attends to her perceptions and recognizes that she is not invincibly led to a particular good and consequently regards the particular good as unworthy of love and she who is not attentive and thus has no such recognition.

The answer, I suggest, lies in how we might understand the difference between having an attitude of genuine commitment to the search after truth

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62   Malebranche, *The Search*, Elucidation x, p. 616.

and one that is not so committed. The person who is committed to the search after truth recognizes that her impression towards the good in general is not exhausted by a particular good. She also recognizes that only God can fill this impression and acknowledges it. She who is less committed or not committed at all to the search after truth has the same capacity to recognize this truth, for according to Malebranche, we are all equally capable of attending to the fact that we are not compelled to love particular goods. What she lacks, however, is the recognition of this fact. Attention, on this view, is no more than the recognition that perceived goods do not compel our love and are thus not representative of the true good. It is an affirming of God and a denial of sensible things. It is the recognition that avoids the divided mind characteristic of postlapsarians. This recognition is not an efficient cause of anything, nor does it produce any new modalities. Recognizing the noninvincibility of our desire for particular goods allows us to adopt an attitude in relation to our perceptions—that they do not represent objects worthy of our love. Apprehending this fact and adopting this attitude has neither real causal power nor any physical effect—but it does have moral value.[63]

How can we understand the characterization of attention as that which God does *in us with us* in the moral realm? God gives us ideas and inclinations. When God does these things in us *with* us, we contribute our recognition of their moral status. We recognize that our impression towards the general good is unfulfilled and we recognize that the present idea is not of the right kind to fulfill it. We listen to "the impulse to go farther" and recognize "that the impression we have for the universal good . . . is neither constrained nor necessitated to halt at this particular good."[64] When we deny the status of true good to our ideas of particular goods, by natural law God causes us to see another idea in Him. This new idea will serve to distract us from our desire of the previous particular good we perceived and allow us to move on from it.

If we are not attentive, we contribute nothing to what God does in us. Without attending to our ideas, we receive ideas and inclinations in the same way that bodies receive figure and motion. The difference is that, as rational beings, we have the power to evaluate our perceptions. To stop at a particular good or to stand still with a particular good is to fail exercise this power. For that, we are the authors of sin. Our recognition of our perceptions as finite

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63   Notice that even though the attitude concerning our perceptions is nothing causal or physical, there are consequences of this attitude. Malebranche claims that our sins and our virtues are the occasional causes for pain or pleasure, respectively. He discusses this at length in *Traité de la nature et de la grâce* and in *Traité de morale*.

64   Malebranche, *The Search*, Elucidation 1, p. 548.

goods and not the true good is what determines our moral value.[65] Being nothing real and not causally efficacious, the acknowledgment is compatible with occasionalism.[66] By focusing on the moral status of our ideas we focus on our mind's union with God and, to some extent, approach the relationship that Adam had with God before original sin. Refusing to attend to our perceptions and thus recognize the noninvincibility of our desire for particular goods is to replicate the sin of Adam. This is a turning away from God and towards particular things.[67] The freedom that allows the mind to remain united to God allows human beings to bear moral responsibility.[68]

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65 This explanation moves us beyond accounts like that of, for instance, André Robinet, who states that freedom, like the nature of the soul, is a mystery or a "spiritual cause." See his *Système et existence dans l'oeuvre de Malebranche*. Paris: Vrin, 1965. Pp. 457, 461. Robinet eventually takes the position that the will is an occasional cause and the soul in its entirety is freedom (p. 464). This position, however, makes it difficult to understand how we can recover a sense of responsibility for our free acts.

66 Miklos Vetö states that while Malebranche detaches freedom from being, he fails to develop a proper conceptual articulation of it. The result of what Vetö calls the "philosophème de la liberté-rien" is that while freedom is something other than being, we are unable to speak of it without drawing on metaphors from the physical world. While it is certainly true that Malebranche leans on the 'inappropriate comparison' I think that in the end we can speak profitably of Malebranche's conception of freedom without using metaphor. See his "Le rien de la liberté: Malebranche et la philosophie de la volonté." *Revue de la Métaphysique et de Morale*. n. 4, 1987: 473–502.

67 Explaining original sin is a problem for Malebranche. As postlapsarians, we err and sin because our senses have great power over our minds. While this circumstance does not excuse sin and error, it at least offers a good explanation for why they happen. In Adam's case he "was in all senses perfectly free. He was master of his attention. He could contemplate the beauty of the order and nourish himself uniquely and peacefully with my [God's] substance. In order to love me, he had no need for me to influence [*prévinsse*] his will with some pleasure; because he had no contrary pleasure to oppose [*combattre*]: and the sweetness of the joy, that he tasted in the happy state in which I put him, ought to have sufficed to content him right up to the day of his full and complete reward" (*Méditations chrétiennes*, OC10, Méditation XIII, sec. xiii; p. 145. See also *Traité sur la nature et sur la grâce*, OC5, Pt. II, sec. xxx; p. 97, sec. xxxiv; p. 101). Given Adam's control over his senses, his more intimate connection with God, and his total lack of concupiscence, it is very difficult to see how he could have had a lapse of attention. Indeed, this seems a more challenging question for Malebranche than the compatibility of occasionalism and postlapsarian human freedom. For a discussion of the relationship between creation, original sin, and Christ in Malebranche's theodicy see Rutherford, Donald. "Malebranche's Theodicy." In *The Cambridge Companion to Malebranche*. Edited by Steven Nadler. Cambridge: Cambridge University Press, 2000. Pp. 165–89.

68 The characterization of attention as a kind of perception that is neither efficacious nor has any causal power may seem at odds with what Malebranche sometimes says, especially in

But how are we to understand this responsibility without an explanation for why a mind is attentive in some cases and not others or in the same situation why one mind is attentive and another not? Malebranche would answer that in both cases, the inattentive individual has insufficient knowledge and love of the relations of perfection, that is, the immutable order.[69] Some may naturally be more sensitive to perceiving relations of perfection, and thus acquire it more easily. Others may have benefitted from an education that extolled this knowledge thus building a foundation for a life devoted to the search after truth. But all are alive to the movements within their own minds and bodies. Malebranche would certainly hold that occasions of strong passions and desires ought to serve as triggers for one's search for the truth about oneself, one's power, and ultimately one's relationship to God. While this search provides intellectual joy and pleasure here and now, it ends only with complete knowledge of the immutable order, attainable only in the next life.

In the Preface to *The Search* Malebranche states that

> the body . . . fills the mind with so many sensations that it becomes incapable of knowing things that are at all hidden. Corporeal vision dazzles and distracts the mind's vision so that there is great difficulty in clearly seeing a given truth with the soul's eyes while we are using the body's eyes to know it. This shows that it is only by the mind's attention that any

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the *Traité de Morale*. One of the main topics treated there is that "the soul itself, by its own acts, picks up [*prend*] habits" (*Traité de Morale*, Pt. 1, ch. iv, sec. 1; p. 51). Throughout this work Malebranche indicates that acts produce habits, and habits in turn produce acts. It seems, then, inconsistent to say that attention, if that is what we take true human action to be, is non-causal and non-efficacious. For, these acts do seem to produce something, namely, certain kinds of dispositions. Though there is much more to say on the topic, here I will just state that the *Traité de Morale* is largely framed as a discussion of the kinds of things we need to *suppose* in order to get a better handle on how to acquire a dominant love of God as the general good. Just as, to learn physics, we *suppose* that the cue ball is the cause of the eight ball's movement and thus calculate its resultant trajectory, to learn morality we might need to suppose certain things in order to better see how we as moral beings relate to God. While it is certain that our dispositions change over time, and that these changes are related to our acts, Malebranche never states that the relationship is of any kind other than the regular relations we observe in mundane physical interactions. For a detailed exposition and critique of the (supposed) inconsistency between acts producing habits and the causal inefficacy of human beings see Pyle, *Malebranche*, ch. 9.

69   Malebranche, *Traité de Morale*, OC11, Pt. 1, ch. 1, sec. xix; p. 24. Later in this work Malebranche also notes that it is never guaranteed that human beings will act according to their dominant habit. Even the pious are liable to follow bodily pleasures instead of intellectual ones (Pt. II, ch. 1, sec. i; p. 153). Constant vigilance is the only way to avoid error.

truths are discovered or any sciences acquired, because the mind's atten-
tion is in fact only its conversion and return to God.[70]

Our power as postlapsarians is meagre and the obstacles to virtue are great.
But we have the tool to allow us to return to God and see with the "soul's eyes"
instead of the eyes of the body. Attention is how we return to God, by recogniz-
ing His power and loving Him for it, and refusing to love anything and every-
thing else as though it were capable of causing us pain or pleasure. And while
there may be no difference in how we *feel* before and after attending, nor any
difference in the world, the difference in our moral status is great.

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70   Malebranche, *The Search*, xxxviii.

PART 2

The Giants

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Hobbes on Moral Virtue and the Laws of Nature

Donald Rutherford

1 Introduction

Thomas Hobbes's claim that, in the state of nature, the laws of nature "consist in" the moral virtues seems on the face of it an unlikely position for him to hold.[1] It certainly is not how the majority of commentators have understood Hobbes's doctrine of the laws of nature,[2] and the position itself may strike one as incongruous: how can a *law*, a rule that enjoins an agent to act in a specific manner on pain of wrongdoing, be equated with a *virtue*, a habituated character trait, whose possessor is disposed to perform rightly in any situation, without appeal to an explicit rule? On many accounts, a law-based morality and a virtue-based morality are treated as mutually exclusive alternatives, with the former construing right action as action in accordance with a determinate rule and the latter construing it in terms of the judgment of the virtuous agent whose standard of choice cannot be reduced to a determinate rule.[3]

Yet the distinction between a law-based morality and a virtue-based morality is far from absolute. For Aquinas, the domain of natural law is coextensive with the domain of moral virtue, and there is a close theoretical connection between the two. Natural law is law dictated to the will by reason, and indirectly by God, which provides the standard according to which morally right and wrong actions are judged. At the same time, a morally virtuous agent is one whose will, reflecting the sum of her motives, is structured by reason in such a way that she is habitually disposed to act as natural law requires without

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1 *Leviathan* 26, p. 185. Citations of *Leviathan* (hereafter: L) are by chapter and page number in Thomas Hobbes, *Leviathan. Revised Student Edition*, ed. Richard Tuck. See the Bibliography for abbreviations used in citing other works by Hobbes.

2 The two leading approaches interpret the laws of nature either as principles of duty commanded by God or as principles of prudence—prescriptions for actions that are conducive to an individual's self-preservation. Although the dust has not yet settled on this debate, the preponderance of opinion has sided with the latter as more in keeping with the naturalistic tenor of Hobbes's philosophy. The most thorough defense of the first reading is that of Martinich 1992, who develops ideas advanced by Taylor 1938 and Warrender 1957. For defenses of the second reading, see Gauthier 1969; Watkins 1973; Hampton 1986; Kavka 1986; Darwall 1995.

3 See Schneewind 1990 on the changing relationship of these concepts in the seventeenth and eighteenth centuries.

explicitly appealing to it as a rule.[4] To a first approximation, the law formulation and the virtue formulation comprise two complementary aspects of natural law: one externalist and rooted in divine reason, the other internalist, reflecting the dispositions of a correctly ordered human will.[5]

The relevance of these ideas for the understanding of Hobbes's philosophy may seem remote at best. I will argue, however, that it is worth revisiting their relation to his doctrine of the laws of nature, and that, when suitably framed, the Virtue-Law Equivalence thesis (as I will call it) offers a promising basis for making sense of Hobbes's diverse claims about the laws of nature. That Hobbes affirms some version of this thesis is suggested by his statement in chapter 26 of *Leviathan* that "the Lawes of Nature, which consist in Equity, Justice, Gratitude, and other morall Vertues on these depending, in the condition of meer Nature . . . are not properly Lawes, but qualities that dispose men to peace, and to obedience" (L 26, p. 185).[6] As Hobbes presents his position, insofar as they operate within the "condition of meer Nature," the laws of nature consist in moral virtues, or in certain qualities of character that dispose human beings to peace and obedience.

That the notions of virtue and vice play an important role in Hobbes's thought has not gone unremarked. Among others, David Boonin-Vail has argued that Hobbes should be read as a virtue theorist, who construes morality principally not in terms of the rightness or wrongness of action—actions that do or do not conform to the laws of nature—but in terms of the goodness or badness of character, that is, virtue and vice.[7] Two general considerations drawn from the argument of *Leviathan* support Boonin-Vail's reading. First, assuming that the crucial condition for the formation of a commonwealth is the existence of mutual trust among the covenanting parties, this condition is best understood in terms of those individuals possessing certain enduring qualities of character. We are prone to trust others not just on the basis of how they have performed in the past, but on the basis of our judgment of how they *will* act in the future, that is, their dispositions to act. Second, agents will be more likely to act in ways that generate trust in others if they are not merely following rules on a case-by-case basis, but if they are habituated to certain

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4   On Aquinas's conception of natural law, see *Summa Theologicae*, IaIIae, q. 90, a. 1; q. 91, aa. 1–3; on the equivalence of natural law and moral virtue, see ibid., q. 94, a. 1.

5   For a defense of this claim, emphasizing the continuity between Aquinas's position and that of the early Stoics, see Mitsis 2003.

6   For other texts affirming this relation, see L 15, p. 111; L 26, p. 197; DC 3.29–32.

7   Other authors supporting such a reading include Skinner 1991, 1996; Ewin 1991; Berkowitz 1999. Miner 2001 is a pointed critique of Berowitz's account.

forms of action—that is, dispositions to perform those actions become endur-ing parts of their characters. On both counts, what Hobbes needs to get a com-monwealth off the ground are individuals who do not simply obey the laws of nature but have stable dispositions to act in ways expressed by those laws, that is, individuals who have, in the relevant sense, virtuous characters.[8]

Acknowledging this point, it remains true that Hobbes frames the bulk of the argument of *Leviathan* in terms of the "laws of nature," and so we require a fuller explanation of the relation for him between virtue-talk and law-talk. Here Boonin-Vail fails to deliver a satisfactory answer. He glosses "virtue or vice" as "the disposition to embrace or betray the law of nature" (1994: 146). Such an account appears to leave us with a free-standing structure of natural law that is conceptually prior to virtue and vice. The laws of nature enjoin action that is understood to promote self-preservation; and the virtuous person is that per-son who is disposed to obey those requirements. Going further, one might say that the virtuous person is that person who is appropriately responsive to the normative demands of natural law, that is, who because of facts about his char-acter consistently acts as the laws of nature require him to act.[9]

The problem with this account is that it enshrines the view that for Hobbes the laws of nature are in a strict sense *laws*: commands or prescriptions that obligate agents to act in accordance with them. Yet Hobbes explicitly denies that the laws of nature are "properly laws" in the state of nature.[10] Furthermore, there is reason to believe that the main argument of Part 1 of *Leviathan* does not take as a premise the existence of principles that are practically necessary in the sense that failure to act in accordance with them is a violation of objec-tive norms of morality or rationality. In the state of nature, the natural condi-tion of mankind, there are only individuals determined to act by a variety of appetites and aversions, some of which promote further ends that they them-selves desire (e.g. peace and self-preservation). Of course, not all agents do act in ways that promote these ends, and not all agents understand that such ways of acting are effective in promoting ends they desire. For this reason, Hobbes

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8   Boonin-Vail labels these the "argument from revealed disposition" and the "argument
     from habituation" (1994: 145–76).

9   According to Boonin-Vail, "Hobbes's moral philosophy is best understood as culminating
     in a normative account of human virtue which identifies an objectively valid moral law,
     and which celebrates as just the person who is disposed to follow that law, and to take
     pleasure in it, without regard to the beneficial consequences of doing so" (1994: 124).

10   See also L 15, p. 111. This is a point that Boonin-Vail acknowledges in rejecting a divine-
     command account of natural law (1994: 102–3). Nevertheless, he upholds a reading of the
     laws of nature as supplying "moral standards in the state of nature" (71).

conceives of his work as having an important pedagogical dimension: he aims to instruct individuals in how to act so that they may satisfy desires basic to their natures.

Presented in these terms, the laws of nature look very much like principles of prudence. Lying behind this, though, is Hobbes's revisionary account of the practical force of reason. Although the laws of nature are represented as having a prescriptive form (they "forbid," "command" etc.), they do not engage appetite directly as commands of reason. This is because reason for Hobbes is limited to acts of "reckoning," based on relations among signs arbitrarily linked to perceived or imagined objects of desire.[11] To the extent that the laws of nature have a practical force in the state of nature, this must be explained either in terms of the way in which the laws determine desire by representing the (theoretically) necessary relations between the ends of peace or self-preservation and certain forms of endeavor as means to those ends, or in terms of the laws themselves being stable dispositions to endeavor in ways that promote the ends of peace and self-preservation.[12] In the latter sense, the laws of nature can be taken, as Hobbes says, to consist in the moral virtues.

In fact, Hobbes ascribes a variety of identities to the laws of nature.[13] It is not part of my argument to insist that he be read as a virtue theorist in ethics, as opposed to a natural law theorist, a contract theorist or any other kind of theorist. His position cannot be fitted neatly into any of these categories without sacrificing some of its detail. My claim, simply, is that on textual and philosophical grounds there is reason to see the concept of virtue as playing a key role in his conceptualization of the practical import of the laws of nature. Within the state of nature in particular, the laws of nature are realized as virtues: stable dispositions of endeavor, structured by knowledge of the necessary relations between such endeavor and the ends of peace and self-preservation. This does not account for everything Hobbes says about the laws of nature, but it constitutes an important part of his philosophy that has not received the attention it deserves.

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11   "Out of all which we may define, (that is to say determine,) what that is, which is meant by this word *Reason*, when wee reckon it amongst the Faculties of the mind. For REASON, in this sense, is nothing but *Reckoning* (that is, Adding and Substracting) of the Consequences of generall names agreed upon, for the *marking* and *signifying* of our thoughts" (L 5, p. 32).

12   For a development of the first of these approaches, see Darwall 1995.

13   In a companion paper, "Hobbes and the Language of the Laws of Nature" (unpublished), I explore in detail the significance of the prescriptive language in which Hobbes expresses the laws of nature.

2   Natural Law in the State of Nature

Hobbes assigns two principal functions to natural, or moral, law.[14] The laws of nature are, first, "the Praecepts, by which men are guided to avoyd that condition [of war]" which is a consequence of the state of nature (L 31, p. 245). Taken in this sense, the laws of nature command men to seek peace and to endeavor to perform those actions that are necessary for peace.[15] Second, the laws of nature place limits on the justice of a sovereign's commands: "Subjects owe to Soveraigns, simple Obedience, in all things, wherein their obedience is not repugnant to the Lawes of God" (ibid.)—which is to say, the laws of nature. Exactly how far Hobbes extends the rights of subjects to disobey the sovereign is uncertain, but at the very least he recognizes the laws of nature as a standard against which the equity of a sovereign's actions can be assessed.[16]

In both of these roles the laws of nature appear to function as normative principles that spell out how individuals in the state of nature, or sovereigns exercising their rule, ought to act.[17] This 'ought' can be interpreted either

14   On the equivalence of these expressions, see L 26, p. 197; DC 3.31. A third role Hobbes assigns to the laws of nature is as principles of international law: "Concerning the Offices of one Soveraign to another, which are comprehended in that Law, which is commonly called the *Law of Nations*, I need not say any thing in this place; because the Law of Nations, and the Law of Nature, is the same thing" (L 30, p. 244).

15   Formally, Hobbes defines a law of nature as "a Precept, or generall Rule, found out by Reason, by which a man is forbidden to do, that, which is destructive of his life, or taketh away the means of preserving the same; and to omit that, by which he thinketh it may be best preserved" (L 14, p. 91). However, when he goes on to state particular laws of natures, he emphasizes the end of avoiding war or promoting peace. According to the "Fundamentall Law of Nature," "it is a precept, or generall rule of Reason, *That every man, ought to endeavour Peace, as farre as he has hope of obtaining it; and when he cannot obtain it, that he may seek, and use, all helps, and advantages of Warre*" (L 14, pp. 91–2). Hobbes represents the other eighteen laws of nature as following from the fundamental law, insofar as endeavors that violate these laws (e.g. those that express ingratitude, insociability or contempt) promote a condition of war and hence violate the fundamental law, "which commandeth men to *Seek Peace*" (see L 15, pp. 105–7).

16   On the sovereign's subjection to the laws of nature, see L 28, p. 214 and L 30, pp. 231, 236. Hobbes rejects resistance to the sovereign's rule even when it is known to violate the laws of nature (L 24, p. 172). He later cites punishment of the innocent as an example of a sovereign's violation of the laws of nature (L 26, pp. 192–3; L 28, p. 219).

17   "And the same Law, that dictateth to men that have no Civil Government, what they ought to do, and what to avoyd in regard of one another, dictateth the same to Commonwealths, that is, to the Consciences of Soveraign Princes, and Soveraign Assemblies" (L 30, p. 244).

morally or prudentially. If the laws of nature are considered as delivered in the word of God, then they are substantive moral principles that express how individuals in the state of nature and sovereigns in their commonwealths are obliged to act, on pain of divine punishment. Alternatively, the force of the laws can be taken to be merely prudential. With respect to individuals in the state of nature, the laws of nature articulate ways that they ought to act in order to realize the end of peace, and hence the preservation of their own lives. With respect to the sovereign, the laws of nature are instrumental for the preservation of the commonwealth: sovereigns who act contrary to the laws of nature jeopardize the security of the state, and their own place as sovereign, by inclining their subjects to rebellion.

Hobbes's central argument in *Leviathan*, leading up to his explanation of the institution of a commonwealth in chapter 17, does not presuppose an interpretation of the laws of nature as divine commands. Although Hobbes is open to individuals taking themselves to be obligated by the laws of nature because they are understood as expressions of the word of God,[18] his account of the role the laws play in constraining the unsociable passions of individuals and guiding them toward the formation of a commonwealth does not require that the laws be understood in this way. Even if we credit Hobbes with the belief that God has dominion over all things, Hobbes does not assume that this belief can be imputed to all human beings or that the fact of God's omnipotence alone suffices to ground the normative force of the laws of nature.[19]

Accepting this point, it is nonetheless usual to suppose that Hobbes must recognize the laws of nature as normative in *some* sense. The laws are framed in prescriptive language, and it is hard not to think that the purpose of the laws is tied to the restrictions they impose on an agent's will. An agent who understands, and is motivationally responsive to, the laws of nature will know that there are certain actions that he ought, or ought not, to endeavor, and he will *thereby* feel himself bound, or obliged, to act as the laws prescribe. This is the standard way of conceiving of the operation of normative principles, whether those principles are categorical moral imperatives or hypothetical imperatives conditioned by a prior end, including one determined by an agent's own desires.

In the case of Hobbes's philosophy, this assumption must be carefully scrutinized. Outside of a commonwealth and apart from the sanction they receive as divine commands, there are no objectively valid normative principles—no

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18   As is evident from L 30, p. 233, and L 31, p. 245: "There wants only, for the entire knowledge of Civill duty, to know what are those Lawes of God."

19   See, in particular, L 31, pp. 245–6.

laws that bind the will by virtue of their expressing objective requirements of morality or rationality. There are instances of the will being "bound" by determining causes; however, these are not instances of its being bound by normative principles. Rather, such instances of psychological determination are the *sources* of normative statements, including the laws of nature.[20]

Support for this conclusion is offered by the important qualification Hobbes adds to his account of the laws of nature at the end of chapter 15:

> These dictates of Reason, men use to call by the name of Lawes, but improperly: for they are but Conclusions, or Theoremes concerning what conduceth to the conservation and defence of themselves; wheras Law, properly is the word of him, that by right hath command over others. But yet if we consider the same Theoremes, as delivered in the word of God, that by right commandeth all things; then are they properly called Lawes. (p. 111)

As Hobbes explains his position, the laws of nature only function as "laws properly," which convey an authoritative demand for action, if they are the command of a person whom one is obligated to obey.[21] In a commonwealth this role is filled by the sovereign. In the condition of "meer Nature," it can be filled only by God, on the condition that we consider the laws as "delivered in the word of God." But Hobbes does not assume that all human beings take the laws to be commanded in this way, and so for such individuals the laws of nature are not properly laws outside of a commonwealth. Instead, they are no more than "Conclusions, or Theoremes concerning what conduceth to the conservation and defence of themselves." I read Hobbes as asserting here that the cognitive content of the laws of nature is limited to a theoretical claim about the relation between certain forms of endeavor, on the one hand, and the avoidance of war, on the other. Given the psychology of human beings, he believes, understanding such "conclusions" will have predictable effects on how individuals are disposed to act. However, it is misleading to construe this as a responsiveness to norms, for in the state of nature, apart from the will of God, there is nothing to give such norms an authority sufficient to command the wills of human beings.

Hobbes returns to this point in chapter 26 of *Leviathan*, insisting that philosophers' attempts to formulate a moral law independent of civil law fail to identify practical requirements that agents are required to observe:

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20   Cf. Darwall 1995; 2000.
21   For Hobbes's specification of the strict sense of law, see L 26, p. 183.

> The Authority of writers, without the Authority of the Common-wealth, maketh not their opinions Law, be they never so true. That which I have written in this Treatise, concerning the Morall Vertues, and of their necessity, for the procuring, and maintaining peace, though it bee evident Truth, is not therefore presently Law; but because in all Common-wealths in the world, it is part of the Civill Law: For though it be naturally reasonable; yet it is by the Soveraigne Power that it is Law: Otherwise, it were a great errour, to call the Lawes of Nature unwritten Law; whereof wee see so many volumes published, and in them so many contradictions of one another, and of themselves. (L 26, p. 191)[22]

No prescriptive statement, whether advanced in a commonwealth or in the state of nature, bears the force of law unless commanded by an acknowledged authority, either God or the sovereign.[23] Hobbes allows that propositions offered as moral laws may express contents that are *true*, but those propositions do not thereby qualify as laws in the strict sense. Significantly, he includes his own statements of the laws of nature in this category: they reflect truths about the means necessary for achieving and maintaining peace, but they are not properly laws unless sanctioned by sovereign power.[24]

Noteworthy about this passage also is Hobbes's framing of the crucial premise of his argument as a claim about the "Morall Vertues" rather than natural law. This reflects a pattern observed throughout *Leviathan*. The "Lawes of Nature," Hobbes writes, "which consist in Equity, Justice, Gratitude, and other morall Vertues on these depending, in the condition of meer Nature (as I have said before in the end of the 15th Chapter,) are not properly Lawes, but qualities that dispose men to peace, and to obedience" (L 26, p. 185).[25] Hobbes's statement that the laws of nature consist in the moral virtues should be taken seriously. The reality grounding what he calls the "laws of nature" are certain

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22   This paragraph expands significantly on the Latin text: "In an established commonwealth, the interpretation of the laws of nature does not depend on teachers and writings of moral philosophy, but on the authority of the commonwealth. The doctrines may indeed be true; but authority, not truth, makes law" (OL 3:202).

23   See also L 26, p. 185.

24   I take this to be consistent with Hobbes's statement at the end of chapter 13: "And Reason suggesteth convenient Articles of Peace, upon which men may be drawn to agreement. These Articles, are they, which otherwise are called the Lawes of Nature" (p. 90).

25   See also L 15, p. 111; L 17, p. 117; and L 26, p. 197: "*Naturall* are those which have been Lawes from all Eternity; and are called not onely *Naturall*, but also *Morall* Lawes; consisting in the Morall Vertues, as Justice, Equity, and all habits of the mind that conduce to Peace, and Charity; of which I have already spoken in the fourteenth and fifteenth Chapters."

stable dispositions to action, namely, those necessary for procuring and maintaining peace (L 26, p. 191). It is above all these dispositions, or "manners" (to use Hobbes's word) that must be present if human beings are to find their way out of the state of nature and into civil society. They will succeed in this attempt just in case enough of them are disposed to act in the ways required for the formation of a commonwealth, that is, enough of them possess what Hobbes calls "moral virtue."

The importance of this point is brought out by Hobbes's discussion of justice in chapter 15 of *Leviathan*. He begins with what appears an outright denial of the possibility of justice in the state of nature: "the nature of Justice, consisteth in keeping of valid Covenants: but the Validity of Covenants begins not but with the Constitution of a Civill Power, sufficient to compel men to keep them: And then it is also that Propriety begins" (L 15, p. 101).[26] In the state of nature, there is "no Propriety; all men having Right to all things" (ibid.). Propriety, or an exclusive right to property, exists only where there is a covenant, or mutual transferring of right, that establishes a distinction among owners; and this can occur only in a commonwealth where such claims are enforceable. Consequently, in the state of nature, there is no injustice, in the sense of a wrongful violation of propriety through failure to keep a valid covenant.

Hobbes presents this argument in introducing his third law of nature: "That men performe their Covenants made." He supports this law by appeal to the second law, "by which we are obliged to transferre to another, such Rights, as being retained, hinder the peace of Mankind" (L 15, p. 100). Since the second law obliges us to enter into covenants involving the mutual transfer of right, if those covenants are not to be "in vain," it is necessary that individuals keep their covenants. The import of this additional requirement, however, is far from clear. We have just seen Hobbes deny that there can be valid covenants in the state of nature, violations of which constitute acts of injustice. So, how can there be a law of nature, which is to say, a law existing in the state of nature, which requires individuals to "perform their covenants made"?

The question can be answered straightforwardly if we attend to the distinction Hobbes draws between the application of the words 'just' and 'unjust' to *actions* and to *men*. In denying the possibility of injustice in the state of nature, Hobbes is referring to unjust actions: "where no Covenant hath preceded, there hath no Right been transferred, and every man has right to every thing; and consequently, no action can be Unjust" (L 15, p. 100). Nothing a person does in relation to another person, no limitation of her natural right to all things, can be considered wrong or sinful in the state of nature. Yet this is precisely the

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26   See also L 13, p. 90.

definition of unjust actions: "the Justice of Actions denominates men, not Just, but *Guiltlesse*: and the Injustice of the same . . . gives them the name of *Guilty*" (ibid., p. 104). Guilt, sin, or more generally wrongdoing, can exist only where an action contravenes a valid law, which can happen only if there is a rightful sovereign.

Hobbes contrasts this use of 'just' and 'unjust' with their use in relation to men. In this case, the terms refer not to a particular action or set of actions performed by an individual but to the general cast of his character: "When they are attributed to Men, they signifie Conformity, or Inconformity of Manners, to Reason. . . . This Justice of the Manners, is that which is meant, where Justice is called a Vertue; and Injustice a Vice" (L 15, pp. 103–4). In distinguishing the justice of manners and the justice of actions, Hobbes makes the familiar point that a just person does not lose the claim to be just, "by one, or a few unjust Actions, that proceed from sudden Passion, or mistake of Things, or Persons" (ibid., p. 104). Yet, if Hobbes means to define, as he seems to at one point, the just person as "he that taketh all the care he can, that his Actions may be all Just" (even if he occasionally errs), he arguably limits the existence of just men to the condition in which there can be just actions, i.e. a commonwealth. If a just manner can be possessed only by one who reliably performs just actions, then the former can exist only if the latter does.

In fact, Hobbes resists this inference. One can possess the virtue of justice independently of whether one can perform just and unjust actions. The "Injustice of Manners," he writes, "is the disposition or aptitude to do Injurie; and is Injustice before it proceed to Act; and without supposing any individuall person injured" (L 15, p. 104). The just person is disposed to deliver what has been promised to another, even when this comes at some cost to himself. "That which gives to human Actions the relish of Justice, is a certain Nobleness or Gallantnesse of courage, (rarely found,) by which a man scorns to be beholding for the contentment of his life, to fraud, or breach of promise" (ibid.). In Hobbes's view, a person is denominated "just," and is said to possess the virtue of justice, on the basis of her responsiveness to other individuals within a social setting, whether or not that responsiveness eventuates in action. Given this, I submit, it is Hobbes's position that the virtue of justice can exist in the state of nature and that it is not explicable as a habituated tendency to perform just actions. Just actions do not exist in the state of nature, but a just person can. The just are those who endeavor to keep promises, including those involving the delivery of goods, even when doing so entails some cost to themselves and independently of whether failing to do so counts as an instance of punishable wrongdoing.

This has important consequences for our understanding of Hobbes's doctrine of the laws of nature. Notice, first, that after introducing his third law of nature, Hobbes proceeds to draw a distinction between the justice of manners and the justice of actions, allowing us to infer that if the third law plays a role in the state of nature it can only be as the *virtue* of justice, not as a law commanding the performance of just actions, of which there can be none. Hobbes's argument in Part 1 of *Leviathan* clearly assumes that the laws of nature play a role in guiding individuals towards the conditions of peace and political union. This role can best be understood if we conceive of the laws of nature as present in individuals in the form of moral virtues.

A final piece of evidence that in the state of nature the laws of nature should be interpreted not as rules that enjoin the performance of action, but as virtues that reflect an agent's disposition to act is found in Hobbes's famous statement that the laws of nature, "oblige *in foro interno*; that is to say, they bind to a desire they should take place: but *in foro externo*; that is, to the putting them in act, not always" (L 15, p. 110).[27] One point Hobbes is making in this passage is that what is required by the laws of nature is not action, but a willingness to act when others are suitably disposed. He illustrates this by describing the ways in which circumstances constrain when it is appropriate to act on the relevant desire, thus endorsing the capacity of the virtuous agent to decide where and how to manifest her virtue.[28] The examples Hobbes cites reinforce the identity of the laws as virtues; and he insists that meeting one's "obligation" to act as the laws require entails nothing more than being prone to endeavor in ways that promote the end of peace: "The same Lawes, because they oblige onely to a desire, and endeavour, I mean an unfeigned and constant endeavour, are easie to be observed. For in that they require nothing but endeavour; he that endeavoureth their performance, fulfilleth them" (ibid.).

All of this offers strong prima facie evidence on behalf of the Virtue-Law Equivalence thesis. Within the state of nature, the laws of nature exist as moral virtues, manifested in an agent's dispositions to act in ways that promote the end of peace. Virtue is *not* a disposition to act as commanded by a categorical rule or law, e.g. "keep convenant," for no such laws exist in the state of nature

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27   The Latin text of *Leviathan* is explicit in affirming the identity: "The laws of nature oblige in *foro interno*, i.e., their transgression is not properly to be called a crime, but a vice. But they do not always oblige in *foro externo*" (OL 3:121).

28   "For he that should be modest, and tractable, and performe all he promises, in such time, and place, where no man els should do so, should but make himselfe a prey to others, and procure his own certain ruine" (L 15, p. 110). See also DC 3.29.

(barring appeal to divine command); and, moreover, meeting the requirements of a general rule on action is not how Hobbes defines the person who "obeys" natural law. Such a person is not a proficient rule-follower, but someone whose character disposes her to be *willing* to act in ways enunciated by the "laws of nature," and to do so when she perceives circumstances to warrant such action. Such are the attributes of the virtuous person.

In enumerating the virtues, Hobbes explicitly mentions justice, gratitude, mercy, modesty, and equity (L 15, p. 111). These describe the qualities of character exhibited by persons who observe, respectively, the third, fourth, sixth, tenth, and eleventh laws of nature. There is no reason to see this list as exhaustive, for Hobbes concludes the list with the words "& the rest of the Laws of Nature." This suggests that for many, if not all, of the laws of nature articulated in L 14–15, there is a corresponding quality of character associated with observance of the law which Hobbes conceives of as a virtue and a corresponding quality of character associated with violation of the law which he conceives of as a vice. In several cases, Hobbes's description of the law makes this obvious. Those who observe the fifth law of "compleasance," by striving to accommodate themselves to others, are said to be "sociable," while those who violate the law are "stubborn, insociable, froward, intractable" (ibid., p. 106). Those who violate the seventh law by causing hurt without reason exhibit "cruelty"; those who violate the eighth law by declaring hatred or contempt of another display "contumely"; and those who refuse to acknowledge others as their equals by nature are "proud" (ibid., p. 107).

Hobbes does not attempt to demonstrate a perfect correlation between the laws of nature and specific virtues and vices. In some cases, the laws state requirements on action that do not correspond to traditional categories of virtue (e.g. the fifteenth law: "That all men that mediate Peace, be allowed safe Conduct"). What unites the laws of nature, and serves as the basis of their derivation from the first, or fundamental, law is that they articulate conditions on endeavor associated with the avoidance of war. Some, such as the fifteeth law, refer to actions deemed necessary as means to the pursuit of peace. Others are more directly connected with behavioral dispositions that Hobbes believes must be broadly present in a population if peace is to be possible. These include the third law ("That men performe their Covenants made"), the fourth law ("That a man which receiveth Benefit from another of meer Grace, Endeavour that he which giveth it, have no reasonable cause to repent him of his good will"), and the fifth law ("That every man strive to accommodate himselfe to the rest"). In each of these cases, Hobbes identifies observance of the law, which is a necessary condition for peace, with possession of a particular moral virtue (i.e. justice, gratitude, sociability).

Acknowledging the evidence on behalf of the Virtue-Law Equivalence thesis, one might still question the nature of the explanatory relation between moral virtue and the laws of nature. Hobbes consistently links possession of the moral virtues to "observance" of the laws of nature. Does this not mean that the person of moral virtue is one who obeys the laws of nature, conceived as a set of prior normative demands on action? I reject this as an interpretation of Hobbes's position. Setting aside an appeal to divine law, the laws of nature are given two identities in the state of nature: as items of theoretical knowledge and as moral virtues. Under the first of these descriptions, the laws of nature are putatively true assertions of causal relations between certain forms of endeavor and the desired end of peace, not expressions of requirements on action that are binding on any human being. Given this, it is a mistake to try to explain moral virtue in terms of obedience to the laws of nature. Rather, from a practical standpoint, virtue is primary in Hobbes's scheme and the basis on which we can best interpret his claims about the laws of nature. This conclusion can be strengthened if we look more closely at Hobbes's account of moral virtue and the cognitive requirements of virtue.

3   The Anatomy of Virtue

Hobbes's fullest treatment of the topic of moral virtue is found in chapter 13 of *De Homine*.[29] He begins his discussion with the notion of an *ingenium*, understood as a disposition or tendency (*propensio*) to respond through appetite or aversion to some kind of thing (e.g. a certain object or a certain attitude perceived in others). Such psychological states must be relatively stable in order to be characterized as dispositions (and thus distinguished from particular appetites and aversions), but there is no requirement that they be immutable. Hobbes describes six ways in which dispositions can arise in a human being: from the constitution of the body; from experience; from habit; from goods of fortune; from one's opinion of oneself; from authorities—and if any of these causes should change, so may the dispositions that depend upon them (DH 13.1; OL 2:111).

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29   This is to be distinguished from his discussion of "*Vertues* Intellectuall" in L 8. The latter, he says, are praiseworthy abilities of the mind that "go commonly under the name of a *good wit*" (p. 50). Of these he distinguishes "natural wit," consisting principally in "*Celerity of Imagining*" and "*steddy direction* to some approved end" (ibid.), and "acquired wit," or reason, "which is grounded on the right use of Speech; and produceth the Sciences"

Hobbes next introduces the idea of a *mos*, or manner: "Dispositions, when they are so strengthened by habit that they beget their actions with ease and with reason unresisting, are called *manners*" (DH 13.8; OL 2:116).[30] He does not say enough to know exactly how he means to distinguish dispositions and manners, but we may assume that manners are stable dispositions that owe their stability (in part) to the fact that they cohere with the overall structure of a person's character. Manners dispose a person to act with ease and with reason unresisting—a point that can be explained by there being no inconsistency between the action toward which the manner disposes the agent and his other ends, including that of self-preservation. If one were disposed to act in ways that were inconsistent with the pursuit of one's other ends, then presumably reason would resist such action and the disposition in question would not become habituated as a manner.

Finally, Hobbes defines virtue itself: "manners, if they be good, are called *virtues*, if evil, vices" (DH 13.8; OL 2:116). This definition, however, is subject to an immediate qualification that seems to undermine any attempt to arrive at a common standard of virtue: "Since, however, good and evil are not the same to all, it happens that the same manners are praised by some and condemned by others, that is, are called goods by some, evils by others, virtues by some, vices by others" (ibid.). Hobbes here reiterates a key thesis about the meaning of the terms 'good' and 'evil' that he defends in both *De Homine* and *Leviathan*. Attributions of good and evil are not cognitive judgments that are made true by accurately representing properties of objects in the world. Rather, we use the terms 'good' and 'evil' to signify our attitudes toward objects—in particular, that we have a desire or an aversion for them. Since desires and aversions vary widely across persons and times, Hobbes infers that there can be no "common Rule of Good and Evill" prior to the formation of a commonwealth (L 6, p. 39). "[S]ince different men desire and shun different things, it is necessary that there be many things that are *good* to some and *evil* to others, as that which is *good* to us is *evil* to our enemies" (DH 11.4; OL 2:96). Accordingly, it seems that there can be no common standard of virtue and vice; as Hobbes remarks, what is prodigality to one is magnanimity to another.[31]

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30   This is broadly the topic of L 11, "Of the difference of MANNERS," though the account there
        is not developed with the same concern for definition that Hobbes exhibits in *De Homine*.

31   See L 4: "For though the nature of that we conceive, be the same; yet the diversity of our
        reception of it, in respect of different constitutions of body, and prejudices of opinion,
        gives everything a tincture of our different passions. And therefore in reasoning, a man
        must take heed of words; which besides the signification of what we imagine of their
        nature, have a signification also of the nature, disposition, and interest of the speaker;

Relying on this principle, Hobbes initially appears to defend a conventionalist account of virtue. Those who consider human beings as they are in themselves (*per se*) and as existing outside of civil society "can have no moral science because they lack any certain standard [*mensura certa*] against which virtue and vice can be judged and defined" (DH 13.8; OL 2:116). According to Hobbes, "a common standard [*communis mensura*] for virtue and vice is found only in civil life"; and, "for that reason, the standard cannot be other than the laws of each and every commonwealth; for natural law, when the commonwealth is constituted, becomes part of civil law" (DH 13.9; OL 2:116–7).

From what Hobbes goes on to say, it is evident that he runs together two separate points here. What varies from commonwealth to commonwealth, and is determined by the civil laws of each, is the scope of the legal obligations of their citizens: what they are required to do on pain of punishment. However, in any commonwealth, there must be certain common expectations concerning the "manners" of its citizens. They must exhibit *justice*, in their disposition to obey the laws of the commonwealth (whatever they may be). And they must exhibit *charity*, which Hobbes conceives as an appropriate responsiveness to the well-being of one's fellow citizens.[32] These two virtues exhaust the scope of "moral virtue," or "the virtues of citizens *as* citizens [*illae civium virtutes, ut civium*]" (DH 13.9; OL 2:117). In addition to these civic virtues, Hobbes acknowledges the other three cardinal virtues of courage, prudence and temperance. These, he claims, are to be distinguished from justice and charity because they are "useful not so much to the commonwealth as they are to those individual men who have them" (ibid.). Still, he goes on to allow that "just as the state is not preserved save by the courage, prudence, and temperance of good citizens, so it is not destroyed save by the courage, prudence, and temperance of its enemies" (ibid.)—from which we can conclude that even if the latter virtues bear on the private good of citizens, they must be present for a stable commonwealth to exist.[33]

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such as are the names of Vertues, and Vices; For one man calleth *Wisdome*, what another calleth *feare*; and one *cruelty*, what another *justice*; one *prodigality*, what another *magnanimity*; and one *gravity*, what another *stupidity*, &c." (p. 31).

32   Hobbes's recognition of the virtue of charity is noteworthy. I take his point to be that, in addition to a willingness to obey the laws of the sovereign, the subjects of a stable commonwealth must demonstrate a minimal concern for the well-being of their fellow citizens, e.g., a willingness to come to their aid in times of crisis. In *De Homine*, he glosses the lack of charity as the condition of "a mind insensible to another's evil [i.e. the evils suffered by another]" (DH 13.9; OL 2:118).

33   In *De Cive* (3.25), Hobbes includes temperance, prohibiting drunkenness and gluttony, as the twentieth law of nature. In *Leviathan*, he distinguishes this requirement from "the

It emerges from this discussion that Hobbes's account of virtue is not a conventionalist one at all. The moral virtues (justice and charity, but also prudence, temperance and courage) are qualities of character, or manners, that must be present in individuals for civil society to exist. Summing up his position in *De Homine*, Hobbes writes:

> So, condensing this whole doctrine of *manners* and *dispositions* into the fewest words, I say that good dispositions are those which are suitable for entering into civil society; and good manners (that is, moral virtues) are those whereby what was entered upon can be best preserved. (DH 13.9; OL 2:117–8)

We find some slippage between his terminology in this passage and the account developed in *Leviathan*. Here Hobbes identifies the moral virtues with those "good manners" (justice and charity) that are necessary for preserving a commonwealth once formed, and distinguishes these from the "good dispositions" that are "suitable for entering into civil society." Since manners are chiefly differentiated from dispositions by the fact that the former are "strengthened by habit," Hobbes's point may be that although a larger set of dispositions must be present for a commonwealth to be formed (dispositions which are subject to variation depending on the circumstances in which people find themselves), for a commonwealth to persist, only two permanent character traits must be present: justice, or a disposition to obey the laws of the sovereign, and charity, or a general regard for the well-being of one's fellow citizens.

This position is broadly consistent with the one Hobbes defends in *Leviathan*: the demands on the characters of individuals who are endeavoring to institute a commonwealth are more exacting than on those who already reside in a commonwealth. The former must exhibit dispositions of sociableness, gratitude, humility, etc. that will support conditions of trust in which a commonwealth can be instituted. Once it has been formed, the fundamental requirement is a willingness to obey the laws commanded by the sovereign. The difference between the two accounts is that in *Leviathan* Hobbes expands the scope of the moral virtues to include the dispositions required for entering into civil society, that is, dispositions that correlate with observance of the laws of nature. Henceforth I shall take this to be Hobbes's considered view: the moral virtues are those "good dispositions" or "good manners" which are necessary for the formation and preservation of a commonwealth.

Lawes of Nature, dictating Peace, for a means of the conservation of men in multitudes; and which onely concern the doctrine of Civill Society" (L 15, p. 109).

By now it should be clear what point Hobbes intends to make in claiming that those who consider human beings as they are in themselves and as existing outside of civil society "can have no moral science because they lack any certain standard against which virtue and vice can be judged and defined" (DH 13.8; OL 2:116). The point is not that a standard of virtue cannot exist outside of civil society, as if thrown into the state of nature we cannot even conceive of what virtue is. The point, rather, is that virtue cannot be *defined* if we consider human beings as isolated individuals with no relation to civil society. Even this may be too strong a statement, if we are thinking of a broader set of virtues that includes prudence, temperance and courage. Hobbes's primary concern, however, is with the virtue of justice, which reflects a stable disposition to regulate one's actions in relation to those of others. Here his substantive thesis is that we cannot establish a common standard of justice, if we consider human beings merely as solitary, natural beings. "Justice, and Injustice are none of the Faculties neither of the Body, nor Mind. . . . They are Qualities, that relate to men in Society, not in Solitude" (L 13, p. 90). For agreement to be reached on the goodness of justice, it must be conceived in relation to a specific end, of which it is a necessary means. Justice and the other civic virtues are most basically the "manners" that allow human beings to live peacefully and securely in community with other human beings.[34] Absent this end, no "common measure" of moral virtue can be had. When the end is supplied, the goodness of justice and the other moral virtues follows from the goodness of the end.

4   The Science of Virtue and Vice

Thus far, I have argued for the identity in the state of nature of Hobbes's laws of nature and the moral virtues. Yet we have seen that Hobbes also defends an account of the laws of nature as "truths," namely, "Conclusions, or Theoremes concerning what conduceth to the conservation and defence" of human beings in the state of nature. We must now consider how these two views can be brought together. In brief, my answer will be that, for Hobbes, the theorems in question are the basis of the stable patterns of endeavor that oblige *in foro interno*, i.e. the moral virtues. For this reason, such theorems also warrant being called "laws of nature," in an extended sense that does not entail the obligation associated with "law properly."

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34   Compare L 11, p. 69: "By MANNERS, I mean not here, Decency of behaviour . . . and such other points of the *Small Moralls*; But those qualities of man-kind, that concern their living together in Peace, and Unity."

Hobbes makes his strongest claim for the cognitive significance of the laws of nature near the end of L 15, in the paragraph in which he equates the "science" of the laws of nature with "the true and onely Moral Philosophy" and the "science of Vertue and Vice" (pp. 110–11). On the face of it, the latter phrase is ambiguous. It might mean either "the science that has virtue and vice as its object" or "the science that belongs to, or is required by, virtue and vice." The context suggests that the latter sense is the one Hobbes intends. Contrasting his position with "the writers of moral philosophy"—particularly, Aristotle—Hobbes argues that, "though they acknowledge the same Vertues and Vices," they misconstrue "wherein consisted their Goodnesse" (p. 111). As Hobbes interprets his predecessors, they locate this goodness in the "mediocrity of passions," and thereby fail to identify the true "cause" of virtue. The Latin text offers a slight variation on this: earlier authors "recognize no other virtues than the passions, albeit mediocre ones" (OL 3:122). Against these authors, Hobbes implies that the "cause" of virtue, or the basis of its goodness, is closely related to what the virtues are in fact praised for: their being "the meanes of peaceable, sociable, and comfortable living" (p. 111).[35]

We can tease apart two ideas that Hobbes combines in this passage. First, as we have seen, Hobbes denies that a common standard of virtue and vice can be found independently of an assumption about the role virtue plays in the formation and maintenance of a commonwealth. The goodness of virtue consists in its being a means of "peaceable, sociable and comfortable living." Second, Hobbes takes issue with the idea that an account of virtue can be given in terms of the degree of passion alone, neither too much nor too little. Though, for Hobbes, virtue is essentially a motivational state, a disposition or *ingenium*, virtues are more specifically *manners*: dispositions "so strengthened by habit that they beget their actions with ease and with reason unresisting" (DH 13.8). What we now find is that the manners Hobbes identifies with the moral virtues are distinguished not just by the fact that they are habituated patterns of motivation, but also by the fact that they presuppose theoretical knowledge, namely, that conveyed in the laws of nature, construed as "theorems or conclusions." In brief, the science (or theoretical knowledge) of the laws of nature is the science of virtue and vice, because it is the knowledge that makes possible moral virtue in the sense defended by Hobbes.[36]

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35   See also DC 3.31–32; B, pp. 164–5.

36   It may be objected that someone can possess the stable patterns of motivation that Hobbes identifies with the moral virtues, while lacking the theoretical knowledge that I suggest is necessary for virtue. While such a scenario is conceivable—there are naturally just, grateful and equitable people—what would be missing in such cases is a standard

To reinforce these points, we can distinguish the following two theses, both of which I ascribe to Hobbes:

> (G)   The moral virtues are good because they are necessary means to a peaceful and secure social existence.
>
> (K)   For the moral virtues to exist, their possessor must have the theoretical knowledge conveyed in the laws of nature.

Hobbes speaks directly to the first of these theses at the end of L 15. He begins by reiterating the relativity of judgments of good and evil, and the consequences of this: "*Good*, and *Evill*, are names that signifie our Appetites, and Aversions; which in different tempers, customes, and doctrines of men, are different.... From whence arise Disputes, Controversies, and at last War" (pp. 110–11). The conclusion he draws from the relativity of value judgments is that in the state of nature there can be no common standard of good and evil. Nevertheless, immediately after saying this, Hobbes introduces just such a standard and links the moral virtues/laws of nature to it:

> And therefore so long a man is in the condition of meer Nature, (which is a condition of War,) as private Appetite is the measure of Good, and Evill: and consequently all men agree on this, that Peace is Good, and therefore also the way, or means of Peace, which (as I have shewed before) are *Justice, Gratitude, Modesty, Equity, Mercy*, & the rest of the Laws of Nature, are good; that is to say, *Morall Vertues*; and their contrarie *Vices*, Evill. (p. 111)

Allowing private appetite to be the measure of good and evil, as it is in the state of nature, inevitably propels people into a condition of war, and a life that is "solitary, poore, nasty, brutish, and short." No one (or almost no one) wants to live in such a condition of "misery": materially and intellectually impoverished, and beset by "continuall feare, and danger of violent death" (L 13, p. 89). Human beings' resistance to being in this state engenders in them a desire for peace: "The Passions that encline men to Peace, are Feare of Death; Desire of such things as are necessary to commodious living; and a Hope by their Industry to

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according to which their "manners" could be established as praiseworthy, and hence virtues. Hobbes's primary thesis, therefore, is about the definition of virtue rather than its psychological realization. At the same time, he believes that virtue is a sufficiently unnatural state for human beings, most dominantly motivated by self-interest, that knowledge of the sort described here is necessary to stabilize the relevant patterns of endeavor.

obtain them" (L 13, p. 90). Hobbes does not need to assume that *every* human being will be motivated in this way; there will always be outliers—e.g., glory seekers who relish the condition of war. But he can be confident that the desire for peace will be widespread, and the more so, the more prolonged and desperate the state of war is. Since 'good' is the word English speakers use to signify the object of their desires, all men "consequently" agree on this: that peace is good.

Although Hobbes defends the thesis that ascriptions of good and evil are relative to agents' desires and aversions, he locates a common standard of good in what he takes to be a universal (or near universal) desire for peace. Let us suppose, then, with Hobbes that peace is good, and that the moral virtues are the "way, or means of Peace," i.e., stable dispositions that individuals must possess in order for a lasting peace to be possible. From these two premises, Hobbes infers ("therefore . . .") that "all men" also agree that the way or means of peace are good. This is in effect thesis (G): the moral virtues are good because they are necessary means to peace. But how exactly does Hobbes support this conclusion? It is not, I suggest, by appealing to a principle of normative reasoning: "if X is good, and Y is a necessary for X, Y is good." It cannot be this, because claims about the goodness of things *as such* do not license claims about the goodness of other things. On Hobbes's account, judgments of good and evil are expressions of agents' desires and aversions. Hence, justice and the other moral virtues will only be denominated *good* on the condition that human beings desire to possess these virtues, that is, desire consistently to act justly, charitably, etc.

The thrust of Hobbes's claim cannot be that whoever desires peace will *ipso facto* desire to act virtuously, and hence will judge the way or means of peace good. Many individuals, surely, will satisfy the first condition without satisfying the second. Missing in such cases will be the knowledge that the moral virtues are necessary for peace: that is, that human beings are able to live peacefully and securely only if they act, from enduring dispositions, in the ways specified by the laws of nature. Yet for peace to be possible, it is not just necessary that people know *that* this is the case; they must also instantiate the character traits in question. That is, peace is only possible, if human beings actually *are* morally virtuous. As it turns out, these two claims are closely related for Hobbes. On his account, human beings are only properly virtuous to the extent that their virtue is grounded in knowledge that the actions to which their virtue disposes them are necessary for peace.

Drawing together these points, we may see Hobbes relying on the following assumptions, which lead to theses (G) and (K):

1. For all (or almost all) individuals peace is a good.
2. Moral virtue is necessary for peace.
3. For moral virtue to exist, its possessor must understand the necessary relation between the end of peace and the actions to which her virtue disposes her.
4. Knowledge of the necessary relation between the end of peace and virtuous action is conveyed in the laws of nature.
5. The virtuous individual consistently desires to act in ways necessary for peace, and judges those ways of acting good.

The conjunction of statements 3. and 4. implies thesis (K): For the moral virtues to exist, their possessor must have the theoretical knowledge expressed in the laws of nature. The path to (G) is slightly more involved. In L 15, Hobbes asserts that "all men agree on this, that Peace is Good, and therefore also the way, or means of Peace . . . that is to say, *Morall Vertues*" (p. 111). It is implausible that he means to advance this as a factual claim. Even if we grant the premise, the conclusion does not follow: in the state of nature, all men do not agree that the way or means of peace are good. What Hobbes can assert, however, is that all *virtuous* individuals agree on this. As a manifestation of their virtue, they desire virtuous acts for their own sake and call such actions *good*. What explains their doing so is that they understand the necessary relation between the action in question and the end of peace. Their understanding of this is the basis of their possessing the virtue in question, and the basis of their judging such actions good. Consequently, we can say that for such a person, virtuous actions are good, because they are necessary means to a peaceful and secure social existence (thesis G).

The meaning of the last 'because' is all important. We cannot take proper measure of Hobbes's position unless we see him as breaking with traditional accounts of practical reason. His central claim, as I read it, is not that the goodness of virtue is normatively justified in relation to the ends of peace and security. It is rather than the person who understands the truth about the relationship between those ends and the patterns of motivation and action that are necessary to realize them will be *determined* to desire and act in the requisite ways, and will express those desires in judgments about the goodness of their objects. The 'because' is thus a causal one: understanding the relation between a desired end and the means necessary for it determines the agent to desire the means, and hence to judge it good.

This account is strongly supported by the psychology Hobbes develops in *Leviathan*. For Hobbes, reason (or more generally, thought) is subordinate to

desire. Desire is primary and is served by thought, which discovers means to the satisfaction of desire: "For the Thoughts, are to the Desires, as Scouts, and Spies, to range abroad, and find the way to the things Desired" (L 8, p. 53). Implicit in this statement is the assumption that the discovery of the "way" to a desired object is sufficient to generate a desire for the way, a desire determined by the connection represented in thought between cause and effect. Describing the way in which the "trayn" of our thoughts is regulated by desire, Hobbes writes:

> From Desire, ariseth the Thought of some means we have seen produce the like of that which we ayme at; and from the thought of that, the thought of means to that mean; and so continually, till we come to some beginning within our own power. And because the End, by the greatnesse of the impression, comes often to mind, in case our thoughts begin to wander, they are quickly again reduced into the way: which observed by one of the seven wise men, made him give men this precept, which is now worne out, *Respice finem*; that is to say, in all your actions, look often upon what you would have, as the thing that directs thoughts in the way to attain it. (L 3, p. 21)

In the state of nature the ends of peace and security impress themselves upon us constantly. The mind by its nature is moved to hunt for causes of the desired effects. All manners of thought may be involved: remembrance of past experience, imagination, fantasy, established teachings, and, finally, science. One of Hobbes's main points in *Leviathan* is that when it comes to civil philosophy, human beings typically have a weak grasp of cause and effect relations. All men desire peace, but they do not keep that end clearly in view when analyzing moral notions. Rather than considering those notions in relation to the end (peace, or self-preservation), they allow themselves to be guided haphazardly by the unreliable lessons of custom:

> Ignorance of the causes, and originall constitution of Right, Equity, Law, and Justice, disposeth a man to make Custome and Example the rule of his actions . . . like little children, that have no other rule of good and evill manners, but the correction they receive from their Parents, and Masters; save that children are constant to their rule, whereas men are not so; because grown strong, and stubborn, they appeale from custome to reason, and from reason to custome, as it serves their turn; receding from custome when their interest requires it, and setting themselves against reason, as oft as reason is against them: Which is the cause, that the doctrine of Right and Wrong, is perpetually disputed. (L 11, pp. 73–4)

"Ignorance of the causes" is a general ill for Hobbes that manifests itself especially in politics and religion. Those who lack science are best off relying on natural prudence, the product of their own experience, in navigating the world (L 5, p. 36). The worst thing they can do is to seek guidance in the writings of theologians and philosophers: "in any businesse, whereof a man has not infallible Science to proceed by; to forsake his own natural judgement, and be guided by generall sentences read in Authors, and subject to many exceptions, is a signe of folly" (L 5, p. 37). The message of *Leviathan*, however, is that scientific knowledge *is* attainable in the domain of civil philosophy. Such science takes the form of a representation in thought of the necessary relation of causes and effects (L 5, pp. 35–6).

We have seen that Hobbes characterizes the laws of nature as examples of scientific knowledge. In formulating the laws of nature, he takes himself to be saying things that are *true* about the consequences of various manners—stable dispositions to action—in relation to the end of peace. This can be seen, for example, in the argument for the eleventh law of nature, that concerning equity:

> [*I*] *f a man be trusted to judge between man and man*, it is a precept of the Law of Nature, *that he deale Equally between them*. For without that, the Controversies of men cannot be determined but by Warre. He therefore that is partiall in judgment, doth what in him lies, to deterre men from the use of Judges, and Arbitrators; and consequently, (against the fundamentall Lawe of Nature) is the cause of Warre. (L 15, p. 108)

While there is undoubtedly the suggestion of a prescription here—if trusted to act as a judge, act equitably, if you want to secure peace—Hobbes's explanation of the "law" centers on a causal claim: inequity, or partiality, is the cause of war; equity is a necessary condition for peace.

This, I suggest, is the crux of Hobbes's position, which is connected in two ways with his account of moral virtue. First, the knowledge conveyed in the laws of nature concerns causal relations between enduring dispositions, or manners, and the attainment of peace.[37] Universal statements about the causal relations between particular kinds of actions and outcomes related to peace would almost certainly turn out to be false. There is no necessity that

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37   This is how Hobbes presents his view in L 26: "That which I have written in this Treatise, concerning the Morall Vertues, and of their necessity, for the procuring, and maintaining peace, though it bee evident Truth, is not therefore presently Law; but because in all Common-wealths in the world, it is part of the Civill Law" (p. 191).

any single instance of injustice should lead to war. But it is not implausible to think that the prevalence of injustice as a disposition among human beings would have this consequence.

Second, I have argued that causal knowledge of this sort is exactly what is required on Hobbes's account to ground the moral virtues. The moral virtues are those stable dispositions, or manners, which are "ways or means to peace." They represent the dispositions characteristic of the person who is effective in furthering the end of peace in his relations with other human beings. Hobbes takes it for granted that all (or almost all) human beings desire peace. However, particularly in the state of nature, they have a limited understanding of how to achieve it. They may try a variety of strategies, offensive and defensive, that have little success in bringing an end to the condition of war. In the face of such failures, Hobbes argues, "Reason suggesteth convenient Articles of Peace, upon which men may be drawn to agreement. These Articles, are they, which otherwise are called the Lawes of Nature" (L 13, p. 90). The laws of nature assert causal relations between certain dispositions and the end of peace. On acquiring such knowledge, the person who desires peace and seeks the means to it, is led ineluctably to those means. When he poses the question, "by what means peace?," his knowledge of the laws of nature immediately supplies an answer. And as a consequence of this he is determined to desire the means, ultimately from a disposition that is "so strengthened by habit," that it produces the appropriate action "with ease and with reason unresisting" (DH 13.8).

5   Conclusion: Making Virtuous Citizens

The project of Hobbes's political philosophy is in many ways a traditional one. At a general level it replicates the goal Aristotle assigns to political science: "to make citizens to be of a certain character, namely, good and capable of noble acts."[38] Of course, Hobbes challenges the principles of Aristotle's science at many junctures. He denies that Aristotle has provided a defensible account of the nature of human beings, of the value of citizenship and of the virtue that is required in citizens. Furthermore, he believes that the treatment of these matters by philosophers and theologians who take their brief from Aristotle has corrupted his fellow citizens' understanding of the basis of sovereignty and the duties of subjects, leading to the protracted conflict of the English civil war.[39]

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38   *Nicomachean Ethics*, 1099b31–32 (Ross translation, slightly revised).
39   See L 30, pp. 236–7; B, pp. 158–9.

Faced with this situation, Hobbes argues for a new beginning in civil philosophy, parallel to that urged by Bacon, Galileo, Descartes and Hobbes himself in natural philosophy. Accordingly, his view is that virtuous citizens can be produced, but that this requires a complete overhaul of the principles of civil philosophy and their promulgation by teachers who can be trusted not to pervert their meaning. His own account of the laws of nature is intended to address this need, and it is Hobbes's view that the truths, or "theorems," expressed in the laws of nature, as articulated in chapters 14–15 of *Leviathan*, are the basis of moral virtues in citizens, or potential citizens, who embody those laws. Ideally, this knowledge by itself would be effective in creating individuals apt for life in civil society: subjects disposed to accept the commands of a sovereign and to live harmoniously with their fellow citizens.

Such a view evinces considerable optimism about the cognitive and motivational capacities of human beings—optimism that may seem at odds with the picture Hobbes paints of the state of nature and the residual shortsightedness and partiality of subjects in a commonwealth. Even granting the truth of what Hobbes says, for his project to be realized, individuals must be receptive to the teachings of reason: on being told that such-and-such form of endeavor favors their own long-term interest, they must be disposed to modify their endeavors accordingly. Hobbes offers an account of how this *can* happen. The question is: how likely is it to happen—and how likely did Hobbes himself believe it was to happen?

That Hobbes defends a parallel account of the authority of the laws of nature as divine commands suggests that he was not overly sanguine about the chances of success through appeal to his readers' powers of reason alone. In *Leviathan*, he emphasizes the importance of pairing reason with eloquence, manifested in a variety of rhetorical techniques, in order to persuade readers to accept the lessons of his work.[40] Finally, and most importantly, Hobbes stresses the role of the sovereign in commanding that the true doctrines of civil philosophy be taught in universities as the basis of a shared understanding of the duties of subjects.[41]

Hobbes's readiness to transfer to the sovereign responsibility for educating subjects in the truths of civil philosophy is consistent with the principles of his philosophy. With respect to the movement of individuals from the state of nature to civil society, Hobbes's own concern is chiefly scientific: to give an

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40   See, in particular, L, "A Review, and Conclusion," pp. 483–4. Skinner 1996 offers an extended defense of this reading, highlighting the difference between Hobbes's approach in *Leviathan* and in his earlier works.

41   L 30, pp. 232–3; L 31, p. 254.

account of the temperaments individuals must possess, and the truths they must believe, in order to escape the condition of war. Here the primary significance of the laws of nature is not as normative principles that command action, but as moral virtues grounded in knowledge of the relations between certain forms of endeavor and the end of peace. Hobbes's aim is to convince his readers that this account is *true*: an accurate understanding of the basis of sovereignty and civic duty, drawn from a realistic account of human nature that posits as basic the desire for self-preservation.

Over and above this, there is the question of how to make people incorporate these lessons into their lives and to comport themselves as citizens of a commonwealth. Here it is critical that Hobbes's readers are not the denizens of a hypothetical state of nature but the citizens of a nation that presumes to be a commonwealth, albeit one whose rightful sovereign remains in question. Consistent with his principles, Hobbes does not in this context assume the responsibility of making virtuous citizens. That task falls to the sovereign, whose duty it is to preserve the state through the teaching of sound doctrine. Hobbes's task is limited to persuading a sovereign of the wisdom of his counsel, allowing the latter to turn theory into practice. About this aim Hobbes expresses some optimism, whether justified or not by the realities of his own situation:

> But when I consider again . . . that neither *Plato*, nor any other Philosopher hitherto, hath put into order, and sufficiently, or probably proved all the Theoremes of Morall doctrine, that men may learn thereby, both how to govern, and how to obey; I recover some hope, that one time or other, this writing of mine, may fall into the hands of a Soveraign, who will consider it himselfe, (for it is short, and I think clear,) without the help of any interested, or envious Interpreter; and by the exercise of entire Soveraignty, in protecting the Publique teaching of it, convert this Truth of Speculation, into the Utility of Practice. (L 31, p. 254)[42]

Hobbes again stresses the scientific basis of his undertaking. He is not propounding a system of unwritten moral law, but the "Science of Naturall Justice," whose "Theoremes" he has "proved" (ibid.). Remaining doubtful that his work will persuade the ordinary run of readers, Hobbes takes comfort in the thought

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42   See also the Latin edition: "Nevertheless, I am not totally without hope that some day, when kings are undiminished in their rights, and learned men and citizens more attentive to their duties, this doctrine, made more tolerable by custom, will be commonly received for the public good" (OL 3:264).

that in the end he needs to convince only one reader for his philosophical endeavors to succeed. Educate that one reader, who exercises sovereign power, and he can command the rest.[43]

Works by Hobbes (Cited)

The text of *Leviathan* is quoted with its original orthography from the edition of Richard Tuck. Translations from the Latin edition of *Leviathan* generally follow those given in *Leviathan, with Selected Variants from the Latin Edition of 1668*, ed. Edwin Curley. Indianapolis: Hackett, 1994.

[B]   *Behemoth, or the Long Parliament*, ed. Paul Seaward. Oxford: Clarendon Press, 2010.
[DC]   *De Cive*, in *On the Citizen*, ed. Richard Tuck and Michael Silverthorne. Cambridge: Cambridge University Press, 1998.
[DH]   *De Homine*, in Thomas Hobbes, *Man and Citizen*, ed. Bernard Gert. Indianapolis: Hackett, 1991.
[L]   *Leviathan. Revised Student Edition*, ed. Richard Tuck. Cambridge: Cambridge University Press, 1996.
[OL]   *Opera Philosophica quae latine scripsit Omnia*, ed. William Molesworth. London, 1839–45; reprint Aalen, 1961.

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43   Earlier versions of this paper were presented at the University of Washington and the UCSD History of Philosophy Roundtable. I thank my audiences, especially Michael Rosenthal, Sam Rickless, Clinton Tolley and Eric Watkins, for their questions and comments.

Sincerity and Skepticism in Pierre Bayle: Navigating the Bayle Enigma

Patricia Easton

The philosophical writings of Pierre Bayle are not only voluminous they are riddled with what appear to be inconsistent claims within and across his corpus. Scholars on all sides admit to puzzlement and have given the name "The Bayle Enigma" to the special difficulties of interpreting Bayle's work.[1] The Enigma is janus-faced: on one side there is the question of the nature and scope of Bayle's skepticism and on the other is the question of the sincerity of his avowals as a faithful Calvinist. Some take his skepticism to lead him to fideism, others away from it; some take his avowals of faithfulness as insincere and ironic, and others as expressions of his Ciceronian integrity. There are two general interpretive strategies in Bayle scholarship. The first might be called the "Enlightenment Interpretation" of Bayle as *philosophe*, deist or even atheist and irreligious skeptic.[2] By contrast, the second might be called the "Revisionist

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1 Richard Popkin refers to the "Bayle Enigma" and has "[…] found the attempt to define the actual beliefs and the actual religion of Bayle quite baffling." (xxix, xxii) see Bayle, Pierre. *Pierre Bayle: Historical and Critical Dictionary: Selections*. Translated by Richard H. Popkin. Indianapolis: Hackett Publishing, 1965.

2 Richard Popkin discusses the "Enlightenment Interpretation" of Bayle as philosophe, deist/atheist and irreligious skeptic and the "Revisionist interpretation" of Bayle as a seventeenth-century skeptic and fideist, see his "Review of *At the Crossroads of Faith and Reason, An Essay on Pierre Bayle*." *Journal of the History of Philosophy*. Vol. 7(1), 1969, 93–94. Adherence to the "Enlightenment Interpretation" is nearly universal among interpreters from Bayle's day to the twentieth century. For recent defenses of this interpretation, see Mori, Gianluca. *Bayle: philosophe*. Paris: Honoré Champion, 1999; Wootton, D. "Pierre Bayle, Libertine." In M.A. Stewart, ed., *Studies in Seventeenth-Century European Philosophy*. Oxford: Clarendon, 1997, pp. 197–226; and O'Cathasaigh, Sean. "Bayle's *Commentaire philosophique*, 1986" in

interpretation" of Bayle as seventeenth-century skeptic and Christian thinker.[3] Since the 1960's, the revisionists have been hard at work reconstructing the historical Bayle and resurrecting his sincerity and integrity as a Christian thinker, perhaps even a fideist. The only point close to consensus among and between interpreters is that Bayle was *some kind of skeptic*.[4] However, the nature and scope of that skepticism remains widely debated.[5] Was Bayle a religious skeptic, a Pyrrhonian skeptic, an academic skeptic, or a philosophical skeptic? Or, was Bayle a forerunner of the "radical enlightenment" as one commentator has recently argued, and not a skeptic in any of these senses?[6]

In this paper I do not attempt to rehearse nor do justice to the various arguments on each side for they are multiple and nuanced; rather, I briefly review what I take to be the strongest argument on each side.[7] Lennon and Maia Neto advance the revisionist position that Bayle was an Academic Skeptic

Studies on Voltaire and the eighteenth century. Oxford: The Voltaire Foundation, 1989, No. 260, pp. 159–182.

3 Adherents to the "Revisionist Interpretation" include W.F. Barber, H. Bracken, C. Brush, P. Dibon, E. Haase, E. Labrousse, W. Rex, R.H. Popkin, T. Lennon, J. Maia-Neto, M. Heyd, J. Kilcullen, and K. Sandberg. For a recent advancement and defense of the revisionist thesis see Lennon, Thomas M. "What Kind of Sceptic Was Bayle?" In *Midwest Studies in Philosophy, XXVI* (2002): 258–279.

4 Todd Ryan's book, *Bayle's Cartesian Metaphysics*. Routledge, 2009, breaks to some extent with the others in framing the "Bayle Enigma," by showing the role of Bayle's several unquestioned concrete metaphysical commitments. Nonetheless, skepticism remains a common rubric, as Ryan writes that his, "principal aim . . . to provide the detailed analysis that might help lay the groundwork for resolving the Bayle enigma, [the] choice of topics being guided by the conviction that Bayle can be thought of as a Cartesian skeptic" (p. 5).

5 Bracken, Harry M. "Bayle's Attack on Natural Theology: The Case of Christian Pyrrhonism." In *Scepticism and Irreligion in The Seventeenth and Eighteenth Centuries*. Edited by Richard H. Popkin and A. Vanderjagt. Brill: Leiden, 1993, pp. 254–266; Bracken, Harry M. "Bayle not a Sceptic?" *Journal of the History of Ideas*. Vol. 25, No. 2, (1964), 169–180; Popkin, Richard. "The High Road to Pyrrhonism." *American Philosophical Quarterly*, vol. 2 (1) (1965), 18–32; Lennon. "What Kind of Skeptic was Bayle?"; Mori, *Bayle: philosophe*; Mori, Gianluca. "Pierre Bayle on Skepticism and 'common notions'." In *The Return of Scepticism: From Hobbes and Descartes to Bayle*. Edited by Gianni Paganini. Boston: Kluwer Press, 2003, pp. 393–413.

6 Israel, Jonathan. *Radical Enlightenment: Philosophy and the Making of Modernity 160–1750*, Oxford: Oxford University Press, 2002.

7 Lennon discusses and reviews multifarious interpretations in his *Reading Bayle*. Toronto: University of Toronto Press, 1999, especially see pp. 14–28; see also Sutcliffe, A. "Spinoza, Bayle, and the Enlightenment Politics of Philosophical Certainty." *History of European Ideas* 34 (2008) 66–76, see especially p. 71.

and believer, and *not* a pyrrhonian skeptic.[8] Mori advances the enlightenment position arguing that Bayle was an irreligious skeptic whose skepticism was tempered by his rationalism in ethics.[9] While I side ultimately with the Academic Skeptic reading of Lennon and Maia Neto I do so with some qualifications on the nature of Bayle's faith, raised by considering Mori's focus on common notions and the natural light. Mori raises an important challenge about the nature of Bayle's rationalism that merits a fuller response than it has yet received. In doing so, I tackle the "Bayle Enigma" by defending the position that Bayle is an Academic Skeptic not a Pyrrhonian one, and that he was sincere in his defense of religious truth *pace* Mori, and finally, *pace* Lennon and Maia Neto, that he did so by appeals to the natural light as a rational faculty. In attending carefully to the scope of his skepticism and the rationalism concerning moral and religious truths, I hope to add some clarity to what constitutes the two faces of the longstanding "Bayle Enigma."[10]

Bayle's Skepticism and Sincerity

To set the stage, there are a few details of Bayle's writings that are worth mention. Bayle's writings include the philosophically rich works, *Pensées diverses* (1682, 1683),[11] a work critical of the idolatry and superstition of Catholicism and in which he argues that atheists can be virtuous; *Nouvelles de la république*

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8   See, Maia Neto, José. "Bayle's Academic Scepticism." In James Force & David S. Katz, eds. *Everything Connects: In Conference with Richard Popkin*. Leiden: Brill, 1999, pp. 263–276; See also Lennon, "What Kind of Skeptic was Bayle?"

9   Gianlucca Mori has more than once referred to the question of Bayle's atheism or unbelief as "undecidable." Mori, Gianlucca. "Bayle, Saint-Evremond, and Fideism: A Reply to Thomas Lennon." *Journal of the History of Ideas*. 2004, 342; see also Mori, *Bayle: philosophe*, p. 9.

10   Lennon in his *Reading Bayle*, warns that commentators typically acknowledge the problems of interpretation and then proceed to add to the proliferation thereof. He rightly notes, "What is needed is not just one more interpretation, but one that will also explain why Bayle is so elusive and hard to interpet." (p. 15) Lennon's full book treatment on the question yields a Bayle whose style is "polyphonic dialogue," and this provides a powerful framework in which to understand Bayle.

11   *Lettre à M.L.A.D.C. Docteur de Sorbonne, où il est prouvé* […] *que les comètes ne sont point le présage d'aucun malheur*, [R. Leers, Rotterdam] 1682; II ed., *Pensées diverses écrites à un Docteur de Sorbonne, à l'occasion de la comète qui parut au mois de décembre 1680*, R. Leers, Rotterdam 1683 [OD III, pp. 3–160].

des lettres, 1684–1687,[12] one of the first scholarly journals; *Commentaire philosophique* (1686),[13] in which he argues that forcible religious conversion is unjustified; and his most known and read work, *Dictionaire historique et critique* (1697).[14] The *Dictionaire historique et critique* is intended as a kind of who's who reference work, its entries arranged alphabetically. Bayle's commentaries appear as "remarks" which although in smaller font are notorious for their length—often far exceeding the main text of the entry itself. As might be expected, the article on "Pyrrho" particularly remarks B and C are the key texts in the discussion of Bayle's skepticism. In remark B, Bayle recounts the conversation between two abbés who debate the subjectivity of sensory qualities, the doctrines of transubstantiation and the trinity, and the problem of evil. The upshot of this conversation, although replete with irony, is that "I am going to show you, that you have no good reason to be sure of [any of] it."[15] All scholars rightly view this as a concession to skepticism in some sense and to some end. Bayle's repeated avowals of his faith notwithstanding, the crux of the matter is that if Bayle is sincere in his religious faith, it must somehow come out of the spoils of skepticism. If however Remark B is evidence of Bayle's deep-seated skepticism and secret irreligion, then his religious faith and sincerity are to be put in question.[16]

Let's turn then to the Academic Skeptic reading. Lennon contrasts academic with pyrrhonic skepticism: "It is not the apparently dogmatic assertion that all that can be known is that nothing can be known, but a methodological

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12 Bayle, Pierre. *Nouvelles de la république des lettres*, [NRL]. Edited by H. Desbordes. Amsterdam 1684–1687. The standard edition to Bayle's works is the *Oeuvres diverses* (1727–31, 2nd ed. 1737), now with supplementary volumes. Hildesheim: Olms, 1964. References are by volume (roman numeral) and page number (arabic numeral). For example, [OD I, 1–760] refers to volume 1, pages 1–760, the text of NRL. Unless otherwise indicated, translations are mine.

13 Bayle, Pierre. *Commentaire philosophique sur ces paroles de Jésus-Christ: contrain-les d'entrer*. Edited by A. Wolfgang, Amsterdam, pt. I–II, 1686; pt. III, 1687. [OD II, 355–496]

14 Bayle, Pierre. *Dictionaire historique et critique*. R. Leers, Rotterdam 1697. II ed. 1702. [4 vol.]

15 P. Bayle, *The Dictionary Historical and Critical*, 4 vols. New York/London: Garland, 1984; reprint of the 1734–1738 English edition, 4:655.

16 See Mori "Pierre Bayle on Skepticism and 'common notions,'" p. 214: "So to ask oneself whether Bayle was a (constructive) skeptical-rationalist or a skeptical-fideist (with destructive results ›with regard to reason‹ as Hume was to say) is to judge his sincerity."; See also Lennon "What Kind of a Skeptic Was Bayle?" pp. 258–279, for a sharp criticism of this insincerity argument, "The upshot of the overall argument here would be that Bayle should be taken at face value in his profession of faith, or at least that one line of argument for not doing so is highly questionable." P. 235.

prescription, that we act in our knowledge claims only with Ciceronian integrity (*integra . . . potestas iudicandi*)."[17] On the Academic Skeptic reading, remark B of article Pyrrho is meant to show the intractability and falsehood of the *specific* metaphysical doctrine of sensible qualities and the theological disputes raised by transubstantiation and the problem of evil in particular, not of *all* such claims to truth as a whole. Popkin's reading of Bayle as a pyrrhonist is rejected but not dismissed: the skepticism of such passages teaches us what in *particular* is *not reasonable to believe*, but it does not tell us this in *general* nor does it tell us what *to believe*. According to Lennon, Popkin was correct that for Bayle faith stands in where reason has no answer, but that Bayle's attack on reason was not of pyrrhonian scope but only of the more limited academic kind.[18]

While not conclusive, there is ample textual evidence of Bayle coming down on one side of an issue or another rather than suspending judgment—as one would expect of a pyrrhonian skeptic. Several passages from the *Philosophical Commentary* are especially potent in demonstrating this. Bayle asks us to weigh moral and religious claims against "the clear and distinct notions of the natural light." In particular, he cautions us against pyrrhonism in favor of the natural light:

> As this wou'd therefore introduce the most fearful Confusion, the most execrable Pyrrhonism imaginable, we must of necessity stand by this Principle, *That all particular Doctrines, whether advanc'd as contain'd in Scripture, or propos'd in any other way, are false, if repugnant to the clear and distinct Notions of natural Light, especially if they relate to Morality.*[19] [my emphasis]

This infuses a distinctively rationalist flavor into the account, perhaps Cartesian or Arminian,[20] that should move us away from the pyrrhonist interpretation.[21]

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17   Lennon, "What Kind of Skeptic was Bayle?" p. 259.

18   Ibid., 261.

19   Bayle, Pierre. *Philosophical Commentary on These Words of the Gospel, Luke 14.23, "Compel Them to Come In, That My House May Be Full."* Edited by J. Kilcullen & C. Kukathas. Indianapolis: Liberty Fund Inc., 2005, p. 75; [OD 2, 370]

20   Sean O'Cathasaigh provides evidence of Arminian influences on Bayle, such as Moise Amyraut and van Paets in his "Bayle's *Commentaire philosophique*, 1686," *Studies on Voltaire and the Eighteenth Century*, n° 260, 1989, pp. 159–182.

21   Kristen Irwin argues that Bayle was not a "superskeptic" (pyrrhonist) as Popkin would have it, but an Academic Skeptic of the sort argued by Lennon and Maia Neto. However, Irwin like Mori is struck by references to reason and further develops the notion of

Reading Bayle as an Academic Skeptic accommodates his style of weighing all sides and his use of rational argument to detect fallacies and errors and his willingness to change his point of view.

To characterize the methodological character of Academic Skepticism, Maia Neto draws on the article on Chrysippus, remark G.

> Antiquity had two sorts of Philosophers; some were like the Advocates [lawyers at a trial], and others like those who report a Cause [case]. The former, in proving their Opinions, hid the weak side of their Cause and the strong side of their Adversaries, as much as they could. The latter, to wit, the Skeptics or Academics, represented the strong and the weak Arguments of the two opposite Parties faithfully, and without any Partiality.[22]

Maia Neto argues persuasively that Bayle exemplifies the reporter not the lawyer in this analogy.[23] The idea is that Bayle approaches philosophical disputes as a reporter (Academic Skeptic)—weighing all sides—rather than a lawyer (Dogmatic) who holds unwaveringly to his position. The reporter, not the lawyer, faithfully and impartially presents the evidence on all sides of a question.

Maia Neto also reminds us that in response to accusations from his compatriot and fellow protestant in exile, Pierre Jurieu, Bayle explicitly espouses Academic Skepticism:

> I recognize myself in what he says about my way of philosophizing, and I admit that, except for the truths of religion, I regard other disputes as only mind-games in which it is a matter of indifference to me whether the pro or the con is proven. If those with whom I live are happier with Aristotelianism than with Gassendism or Cartesianism, I will leave them be, and my friendship and devotion to them will not thereby be diminished, nor am I put off when contradicted, but instead shift my view innocently and without chagrin whenever some greater probability is

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"*le bon sens* (common sense)" and "natural light" in the direction of rationalism, at least in morals. K. Irwin, "Bayle's Qualified Scepticism," (paper presented at the Annual Southern California Philosophy Conference, Pitzer College, California, November 7, 2009).

22   Bayle, Pierre. *The Dictionary Historical and Critical*, 4 vols. New York/London: Garland, 1984; reprint of the 1734–1738 English edition, 2:487; quoted in Maia Neto, "Bayle's Academic Skepticism," pp. 271–272.

23   Maia Neto, "Bayle's Academic Skepticism," p. 272.

presented. This has been throughout the ages the spirit of the Academic philosophers.[24]

The skepticism expressed here is not universal in scope for it excepts truths of religion. Moreover, the spirit of the Academic philosophers embodies the methodological form of inquiry of the sort advocated by Cicero. That is, it is a skepticism aimed at undermining the dogmatic certainty of one's opponent, and achieving the "academic freedom" not only to change one's mind but also to arrive at the most rationally defensible position. It is the embodiment of Ciceronian intellectual integrity, not the destructive tool of the pyrrhonian skeptic.[25]

Viewing Bayle as an Academic Skeptic has the advantage of explaining his various uses of reason, in the spirit of a reporter against dogmatism, while not undermining reason's ability to arrive at truths, at least in principle. Yet no Christian can maintain his position as mere reporter. If Bayle is an Academic Skeptic, and there are no good reasons on one side or the other to believe in God, then how does Bayle justify his commitment to such a truth? Does Bayle avoid the Scylla of skepticism only to run ashore the Charybdis of fideism? The "Bayle Enigma" returns on this question. Lennon cautions using the term "fideism" to describe Bayle's religious faith and avoids it altogether: "Thus, Bayle has generally been described as a fideist. But this term has been used with even less precision than *skepticism*, and thus will be avoided here."[26] It is perhaps worth noting that the term itself seems to have entered into the philosophical lexicon in the nineteenth century.[27] The view Lennon ascribes to Bayle, minus the label, is that, "... sometimes at least, it is reasonable to renounce reason in favor of some other, contrary means of belief formation, if not access to truth."[28] According to Lennon, the contrary means of belief formation occurs by means of a kind of *supernatural* instinct that grounds religious faith.[29]

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[24]   P. Bayle, OD 2, 676; cited and translated in Lennon, "What Kind of Skeptic Was Bayle?" p. 276.

[25]   See Maia Neto, José "Academic Skepticism in Early Modern Philosophy," *Journal of the History of Ideas*, vol. 58(2), (1997), 199–220.

[26]   Lennon, "What Kind of Skeptic was Bayle?" p. 258; for similar reasons S. O'Cathasaigh also cautions against using the term in his "Skepticism and Belief in Pierre Bayle's: Nouvelles Lettres Critiques." *Journal of the History of Ideas*, vol. 45(3), 1984, 421–433.

[27]   See Amesbury, Richard. "Fideism," *The Stanford Encyclopedia of Philosophy* (Fall 2009 Edition). Edited by Edward N. Zalta, http://plato.stanford.edu/entries/fideism/.

[28]   Lennon, "What Kind of Skeptic was Bayle?" p. 258.

[29]   Admittedly, Bayle makes reference to the "supernatural light", sometimes in an endorsing tone. This can be seen most notably in the "Third Clarification" of the *Historical and*

Bayle, therefore, on this Academic reading is seen as supporting such non-rational grounds for belief formation, at least in the domain of religious truth. Yet, Lennon maintains that Bayle holds to the rationality of faith; reason plays a central role in determining which truths are intractable, and which inferences reason can resolve.[30] And indeed, Bayle himself distinguishes between renouncing reason and retreating from reason, and claims that faith never requires the renunciation of reason:

> Jaquelot learned neither from the reproach nor from this clarification. He does not distinguish in his last book between retreating from reason and renouncing reason, and nevertheless they are two very different things. Retreating from reason is not to want to permit this or that philosophical maxim to serve as judge over some religious matter. It is to recognize that a dispute in which this maxim served as a rule would be a disadvantageous battle, since no evident response could be opposed to evident objections. It is to avoid wisely such combat, or to sound the retreat early in order to gain a better position, all under the direction of reason, which itself commands us by several of its most evident axioms to employ it in this way. This is done every day in philosophical controversies: one abandons several axioms of reason and then places oneself under the protection of others. We will discuss this elsewhere. But to renounce reason is to abandon universally all of its maxims. Now this is what those who retreat from reason in the sense that I have just described do not do. If things were explained exactly then a part of reason's axioms would not be taken for the whole of reason, many disputes would be avoided, and those who thought themselves strongly opposed to some other would see that in the end their thoughts were the same.[31]

Lennon insightfully notes that Bayle does not fit nicely into the model of religious belief that proceeds from skepticism to the renunciation of reason

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Critical Dictionary. Bayle refers to the Christian Religion as "supernatural" and that God's authority is "…the polar star of all the discussions and all the disputes about the articles of religion that God has revealed to us through Jesus Christ." (Bayle, *Historical and Critical Dictionary: Selections*, p. 421). But these "truths" concern the hidden mysteries which his methodological skepticism leaves in suspension of judgment and cannot resolve; nor can the natural light decide such "truths". My reading is that these are not bona fide "truths" for Bayle.

30   Ibid., p. 265.

31   Bayle, Pierre. *Dialogues of Maximus and Themistius*. II.6; OD IV, 45a. Thanks to Michael Hickson for pointing out this passage.

to religious truth and faith: "Still farther is it [Bayle's strategy] from the Pyrrhonism of the Christian skeptics who employed argument to achieve the classical epoche that is resolved only by faith. Bayle's concern here, as throughout, is to resolve doubt, not to propagate it."[32] Lennon discounts the inference that because religious belief is based on instinct it precludes rational investigation.[33] However on Lennon's view, where reason fails to provide a resolution to a question of moral import it is faith in the form of a supernatural instinct that generates belief.

Now let's turn to the "Enlightenment Reading" found in the work of Gianluca Mori. Mori objects to the Lennon-Maia Neto Academic interpretation and argues on three grounds that Bayle was a rationalist and consequently an irreligious skeptic: (1) Bayle held a rationalist ethics throughout his career (which is key in his defense of toleration); (2) Bayle's treatment of the problem of evil is a *reductio* of the truths of religion. Bayle argues that the fact and history of evil contradict the idea of God as a perfect being that we have from the natural light; (3) the terms in which Bayle expresses his blind faith are so blatantly irrational as to undermine that faith. Mori views Bayle's skepticism and irreligion as a consequence of his rationalism and discounts Bayle's avowals of faith as insincere or ironic.[34]

The Academic Reading provides ready responses to objections (2) and (3). On the question of evil, Lennon offers a careful reading and explanation of the texts. "Bayle does not offer the Pyrrhonist's wholesale, principled, and permanent renunciation of reason, but a piecemeal, contingent, and temporary withdrawal when, and only when, reason is in conflict either with itself or with faith."[35] Bayle's Academic Skeptical stance to specific doctrines is singular and due to the repugnance of these doctrines to reason. On the question of the terms in which Bayle expresses his faith, Lennon argues that Bayle was sincere in these avowals. The fact that Bayle's faith in some religious and ethical truths cannot be reconciled with reason, despite his almost superhuman efforts to subject them to rational analysis, does not mean that Bayle held them disingenuously.[36] Rather, according to Lennon, it is Bayle's integrity itself that demands he commit only to views that are not repugnant to reason or faith.

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32   Ibid., p. 265.

33   Ibid., p. 273.

34   Mori, "Pierre Bayle on Skepticism and 'common notions,'" pp. 393–413.

35   Lennon, "What Kind of Skeptic Was Bayle?" p. 271.

36   See Lennon and Mori's discussions and exchanges on the question of Bayle's sincerity: Lennon, Thomas M. and Hickson, Michael. "The Real Significance of Bayle's Authorship of the *Avis*." *British Journal for the History of Philosophy* 17(1) (2009): 191–205; Lennon, Thomas

However, the first objection, that Bayle held a rationalist ethic throughout his writings, requires a different kind of answer than Lennon provides and raises deeper questions about the scope and limits of Bayle's skepticism and more importantly in this relation, with regards to his faith. Reading Bayle as an Academic Skeptic helps to explain how reason can have a significant role to play methodologically in determining case by case which religious beliefs can be subjected to doubt. Some beliefs—presumably including moral and religious ones—have the possibility of surviving skepticism. Thus, Bayle having a limited rationalist ethics is at least *prima facie* compatible with Academic Skepticism. But which truths survive methodological doubt and how? If, as Lennon suggests, Bayle appeals to a supernatural light or instinct to ultimately ground the truths of religion then doesn't fideism and irrationalism come in through the back door? By what means does intellectual integrity motivate and justify the truths of religion? Didn't Bayle himself recognize this dilemma?[37]

As Mori points out, Bayle makes repeated appeals to the natural light, common sense, and absolute and universal principles in the realm of ethics in terms that seem to go beyond the Academic reading. For Academic Skepticism is the methodological skepticism of the reporter, an antidote to dogmatism, not a means to establish conclusions with certainty, whether absolute or moral. Mori notes that Bayle frequently comes to conclusions in moral questions by appeals to reason, and defends the rights of conscience and the virtue of toleration. Bayle writes, "There are in relation to morals some principles that the natural light suffices to know the truth, such as *do unto others only as you would have done onto you, honor thy parents* and various others that reason

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M. "A Rejoinder to Mori." *Journal of the History of Ideas*, vol. 65(2) (2004): 335–341; Lennon, "What Kind of a Skeptic Was Bayle?"; Lennon, "Did Bayle Read Saint-Evremond?"; and Mori, "Bayle, Saint-Evremond, and Fideism: A Reply to Thomas Lennon"; Mori, "Pierre Bayle on Skepticism and 'common notions'"; Mori, *Bayle: philosophe*.

37 Bayle discusses the opposition of reason and faith in two key texts of the *Dictionnaire*. The first is the second "Clarification on the Manicheans." In this text, Bayle writes, ". . . the mysteries of the Gospel, being of a supernatural kind, cannot and should not be at all subject to the laws of the natural light. . . . Their essential characteristic is to be an object of faith and not an object of knowledge." Bayle, *Historical and Critical Dictionary: Selections*, p. 412. The second is the third "Clarification on the Pyrrhonians," in which Bayle writes, "For what is faith but that persuasion of the mind whereby, by reasons drawn from probability, we believe certain propositions to be true. If the persuasion results from certainty, in that case knowledge, not faith, is produced in the mind; for as probability begets faith, so it destroys knowledge, and, on the contrary, certainty begets knowledge and destroys faith." See Bayle, *Historical and Critical Dictionary: Selections*, p. 434. Thanks to Michael Hickson for pointing me to these passages.

applies and modifies as is necessary."[38] Mori also identifies passages that compare the truths of morals with those of mathematics: "[…] this proposition *there is a first cause, or a necessary and eternal being* […] does not need a proof any more than *the whole is larger than any of its parts*. You would not expect to prove these things by general consent."[39] Mori goes on to argue that what grounds these truths are *common notions*. The general consent of the people is a *result* of the effect of these common notions not itself the grounding.[40] The common notions, according to Mori, are not blind instinct but rather anchored to the eternal laws of reason.[41]

The claim that Bayle held a rationalist ethics that relied upon common notions is something that has not been fully responded to by Lennon and Maia Neto, although I think a response can be given in their favor.[42] Lennon writes: "All that can be offered here, in brief response to Mori's argument is the distinction that Bayle drew between the domains of ethics and religion, and between them and the domain of salvation."[43] According to Lennon, Bayle's appeals to conscience are grounded in instinct (which is universal and absolute but not rational), and such appeals are a matter of intellectual integrity: "There are many reasons, according to Bayle, why we believe what we do: faith, education, grace, dumb luck, in addition to reason. If Bayle finds himself honestly believing in God, then for him to deny God would be to act without integrity."[44] Thus, Lennon maintains that for Bayle conscience grounds moral belief but remains a non-rational source for judgments of rightness and wrongness. Bayle's rational and religious commitments co-exist but are importantly independent and divergent.

Thus, the debate between Lennon and Mori on the question of the scope of Bayle's faith and reason comes down to how to interpret the truths of the natural light and the foundation for common notions and whether these exhaust the arena of beliefs for Bayle. Another way to put this dispute is to ask whether

38 Bayle, Pierre. *Oeuvres Diverse*. 1964–1982, vol. 4, p. 259; my translation from the French to English; cited in part from the original French in Mori "Pierre Bayle on Skepticism and 'common notions'," p. 404.

39 Bayle, *Oeuvres Diverse*, vol. 3, p. 728a; my translation from French to English. French text cited in Mori "Pierre Bayle on Skepticism and 'common notions'" p. 400.

40 Mori "Pierre Bayle on Skepticism and 'common notions'," p. 400.

41 Mori, "Pierre Bayle on Skepticism and 'common notions'," p. 406.

42 Lennon recognizes that more should be said: "The case that Mori makes for his claim is very impressive, and full justice cannot be done to it here." See Lennon, "What Kind of Skeptic Was Bayle?" p. 270.

43 Ibid.

44 Ibid., p. 279.

the natural light is a form of rational insight that is arrived at by rational analysis and yields truth and falsity (Mori), or is a revealed "truth" that cannot be subjected to rational analysis and scrutiny although does not run counter to it (Lennon & Maia Neto).

The *Philosophical Commentary* has some key passages that are relevant to Bayle's conception of this natural light. This work was first published anonymously as *Commentaire Philosophique* in the Netherlands in 1686, and was presented as a translation from the original in English. It is said that Bayle did so to avoid identification and controversy with critics such as Jurieu.[45] Like all of Bayle's texts, The *Philosophical Commentary* comes with its interpretive difficulties. There is disagreement about whether Bayle held to the thesis that forcible religious conversion is always unjustified—and that toleration is the proper stance with respect to matters of conscience.[46] Nonetheless, the thesis of toleration is a positive philosophical one, its purpose is to lead the reader through many versions of its antithesis leading back to a single and sustained conclusion. Moreover, while the text does not settle the question of whether Bayle was a moral rationalist or not, it provides an account of the natural light as neither blind, nor a renunciation of reason.

Philosophical Commentary draws on a parable found in the Gospel according to Luke. (Luke 14:12–24) The parable is about a man who prepared a great feast but found that many whom he had invited refused to come. In his anger, he commanded his servant, "Go out into the highways and hedges and compel them to come in . . ." (Luke 14:23) From Augustine onward this verse was used to justify forcible religious conversion. Bayle argues on the basis of his examination of conscience that this interpretation cannot be correct. Bayle's view is that even in the case of the "erring conscience,", even in the perceived interest of the errant individual, forced conversion is never justified: ". . . the erroneous

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45 Bayle, *Philosophical Commentary*, xi.

46 The essence of the disagreement is over the "persecutor paradox"—must persecutors obey *their* consciences when they order them to persecute? Bayle's theory of toleration, and its rationalist base, seems to fall apart as he attempts to answer this worry. See Chapter 5 of Walter Rex's *Essays on Pierre Bayle and Religious Controversy*. Hague: Nijhoff, 1965. In *Sincerity and Truth: Essays on Arnauld, Bayle, and Toleration*. Clarendon: 1988, John Kilcullen is less pessimistic than Rex, "Perhaps the natural light is dim but still a light. Bayle's fallibilism therefore does not imply the rejection of examination." (p. 101) Mori maintains there is a strong moral rationalism throughout the *Philosophical Commentary*, see chapter 6 of his *Bayle philosophe*. For a discussion of this debate and the skeptical basis of Bayle's theory of toleration, see Hickson, Michael. "*Reductio ad malum*: Bayle's Early Skepticism about Theodicy." *Modern Schoolman*, vol. 88, issue 3/4, (2011), 201–221. I thank Michael Hickson for bringing this debate to my attention.

conscience procures for error the same rights and privileges that the orthodox conscience procures for truth." Furthermore, Bayle writes that conscience is universally bestowed and natural:

> Every Philosophical attentive Mind clearly conceives, that this lively and distinct Light which waits on us at all Seasons, and in all Places, and which shews us, *That the whole is greater than its part, that 'tis honest to be grateful to Benefactors, not to do to others what we wou'd not have done to our selves, to keep our Word, and to act by Conscience*; he conceives, I say, very clearly, that this Light comes forth from God, and that this is natural Revelation.[47]

The thrust of his argument is that there can be no grounds for forcible conversion in matters of religion and morals, and that each person ought to follow his God-given conscience. Bayle uses the terms "lively and distinct light" and "natural revelation" to describe how the truths of morals and mathematics are shown. Natural revelation and light usually refer to truths that are given through God's creation, i.e., nature. Thus, in the passage above, Bayle associates the "revelation" of moral and mathematical truths with the natural not the supernatural light.

How is the natural light related to reason? At first it may seem natural to read "good sense," "natural light," and "reason" as the same in Bayle's thought. Yet, repeatedly Bayle juxtaposes natural light and reason: "Thus we see every one's determin'd by his own private Lights; if he believe any thing as reveal'd, it's because his good Sense, his natural Light, and his Reason inform him, that the Proofs of its Revelation are sufficient."[48] Notice that "good sense" and "natural light" function as appositives indicating that they refer to the same thing, whereas "reason" is treated as related but distinct. Both good sense/natural light and reason *inform* us that the "proofs of its revelation are sufficient, but it seems that Bayle thinks they do so in different ways. Based upon the Academic Skepticism reading we can see that "reason" has a methodological and instrumental use—it informs us when there is no good reason on one side or another to hold a belief. But this sort of reason can't supply us with the contents or the justification for the positive views we hold—such as *that we ought to act by our conscience*. The natural light is needed to reveal to us ". . . the Ideas of those

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47   P. Bayle, *Philosophical Commentary*, p. 73.

48   Ibid., 74.

eternal Truths contain'd in the first Principles of Reason, or in the common Notions of Metaphysicks."[49]

At work seem to be two distinct epistemic functions, one instrumental and the other teleological. These two epistemic functions—reason and natural light—are distinct but importantly related in moral and intellectual judgment. Natural light reveals to us common notions that illuminate and direct our moral judgment and reason provides the weighing of the means to that end. Bayle puts these two epistemic functions together in the following principle: "*That all particular Doctrines, whether advanc'd as contain'd in Scripture, or propos'd in any other way, are false, if repugnant to the clear and distinct Notions of natural Light, especially if they relate to Morality*."[50]

These passages, and many more like them, treat the natural light and reason as distinct though by no means antagonistic. Where reason cannot tell us that *God exists as a perfect being*, our belief in such a being can be sustained so long as it is not repugnant to the "clear and distinct notions of the natural light."[51] But these clear and distinct notions of the natural light should not be understood as Cartesian clear and distinct ideas, for they are rather less certain than these: "I shan't here consider what the Cartesians teach . . . I shan't, I say, stand to consider this, because it's manifest this Maxim transplanted to Religion and Morality wou'd not do near so well as it does in Physicks."[52] However, the ultimate arbiter of beliefs—mathematical, moral, and religious alike, is the natural light: "Consequently it may be truly affirm'd, with regard even to *Adam*, that the reveal'd Truth was subordinate to the natural Light in him, and from thence was to receive its Sanction and Seal, its statutable Virtue, and Right to oblige as Law."[53]

Religious skeptics of the pyrrhonian ilk suspend judgment about all religious truths thus undermining any defensible commitment to religious faith. The Academic Skeptic limits the scope of skepticism, allows reason to defend some beliefs and reject others, while leaving room for beliefs that are directed by the natural light. He may retreat from reason, but not renounce it. Bayle resists the characterization of faith as arising from the failure of reason, but rather sees it as a feeling or sentiment that arises from the natural light:

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49   Ibid., 68.

50   Ibid., 75.

51   Ibid., 75.

52   Ibid., 494.

53   Ibid., 70.

> . . . till I say, that as Faith affords us no other Criterion of Orthodoxy than the inward Sentiment and Conviction of Conscience, a Criterion common to all, even the most heretical Souls; it follows; that all our Belief, whether Orthodox or Heterodox, is finally resolv'd into this, that we feel it, and it seems to us that this or that is true.[54]

Thus, Bayle resists pyrrhonism by adopting skepticism as a purely *methodological stance*, and he resists fideism by insisting on the role of the natural light in revealing truths to us. In response to his critics of the doctrine of erroneous conscience, Bayle extols his sincerity:

> But what most of all determin'd me to suppress my large Work, was this: I consider'd, that the chief Reason which shou'd oblige me to reply, was the justifying my self against the odious Imputations with which my Opinion was loaded; as tending to an Indifference for all Religion, and a hundred other wicked Consequences of the same kind.[55]

Thus the faith he professes is sincere but it is not one of blind faith; rather it is one guided and informed by the natural light *and* reason.

Conclusion: Navigating the "Bayle Enigma"

I began by identifying the two faces of the "Bayle Enigma": on one side there is the question of the nature and scope of Bayle's skepticism and on the other is the question of the sincerity of his avowals of faith. In alliance with the "Revisionist" strategy, I argued that Bayle, with sincerity and fidelity, avowed his belief in the truths of religion, and that he did so in the spirit of Academic Skepticism. The mysteries and dogmas of religion such as transubstantiation and accounts of evil can't be decided by reason, and hence must leave the understanding in a state of suspense. But this is not a short-coming of reason or the natural light, nor does it cancel the possibility of all religious truths. *That God exists as a perfect being* is a truth that Bayle thought could be judged against the natural light and not only persist but, once passed, aid in the subsequent direction of the natural light. In sympathy with the "Enlightenment" strategy I took seriously the rationalist strains of Bayle's thought and argued that the natural light is the source of moral *and* religious truths, but also that

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54   Ibid., 265.

55   Ibid., 391.

this does not lead Bayle to atheism. In fact, the natural light, on the reading I have sketched, both tests and directs judgment in all matters—physics, mathematics, metaphysics, morals, and religion.

Thus, the portrait of Bayle that I have painted is that of a sincere believer who consistently appealed to reason and the natural light in matters of morals and religion. While the certainty enjoyed by physics and mathematics does not play a role in these truths, each of us holds them according to our conscience in good faith. Interpreting Bayle as an Academic Skeptic allows us to see how reason is employed as a methodological tool against the dogmas of philosophy and religion; and interpreting Bayle's notion of the natural light as the faculty for identifying first principles in metaphysics, morals and religion, we can see how Bayle held that such truths could be discovered and believed in good conscience. While there is more that needs to be said about Bayle's notion of the natural light, in attending carefully to the scope of his skepticism *and* his rationalism concerning moral and religious truths, I hope I have gone some of the way towards clarifying, and thus mapping, the two faces of the "Bayle Enigma."

Berkeley and Locke on Real Knowledge

Margaret Atherton

In one of his notes to himself, published as the *Philosophical Commentaries*, Berkeley lays out a project: "Mem: nicely to discuss Lib 4 ch 4 Locke" (*PC* 549).[1] And on the opposite side of the page, he reminds himself that "it is of the Reality of Knowledge" (*PC* 549a). As it happens, Berkeley never followed up on this reminder in his published writings, inasmuch as there is no explicit reference in them to Locke's *Essay Concerning Human Understanding*, Book IV, chapter 4.[2] An interesting question, therefore, might be, if Berkeley had followed up on his plan and provided a careful and precise discussion of Locke's *Essay* 4.4, what might he have said? What did Berkeley think could be learned from Locke's chapter entitled "Of the Reality of Knowledge"?

There are those, of course, who might think this is not such an interesting question. Surely, they might say, we already know what Berkeley thought about Locke's position on real knowledge, even without any references to Book IV, chapter 4. Locke, after all, was a representative realist, and Berkeley was not. That is, in the eyes of many, it is Locke's version of representative realism that forms the target of the negative arguments that Berkeley used to make room for his own positive doctrine of immaterialism. So, according to this view, we already know what Berkeley would say about Locke's account of real knowledge, because that is exactly how many of Berkeley's arguments are already read, as attacks on Locke.

I entirely agree with this last point that Berkeley is frequently read as fairly explicitly attacking Locke, but I am troubled that Locke is never named by Berkeley as a target with respect to the issue of representative realism. The discussion promised in Berkeley's note to himself never materializes. When Berkeley does give names to those he more generally sees as his opponents, moreover, Locke is not among them. Consider, for example, Hylas's final remarks, as he definitively throws in the towel:

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1 All references will be to Berkeley, George. *The Works of George Berkeley, Bishop of Cloyne*. Edited by A.A. Luce, and T.E. Jessop. 9 vols. London; Edinburgh; Paris: Thomas Nelson, 1948–1957. All references will be in the text. Principle of Human Knowledge: PHK, section number, Three Dialogues between Hylas and Philonous: 3D, dialogue number, page number.

2 Locke, John. *An Essay Concerning Human Understanding*. Edited by P.H. Nidditch. Oxford: Clarendon Press, 1975. References will be in the text, ECHU, book number, chapter number, section number.

> You set out upon the same principles that Academics, Cartesians, and the like sects, usually do; and for a long time it looked as if you were advancing their philosophical *scepticism*; but in the end your conclusions are directly opposite to theirs. (3DIII 262)

A statement such as this at least raises as a question why Berkeley should have omitted the name of the man often taken to be his principal target. So I am going to assume that my original question, what would Berkeley have said if he had actually discussed Locke's Book IV, chapter 4 is indeed a good question. In the course of answering it, I am hoping to be able to shed light as well on the question of Locke's status as a target of Berkeley's argument. For it will be my contention that a nice discussion of Book IV chapter 4 will in fact reveal a much more complicated relation between Locke and Berkeley.[3]

Locke's project as he lays it out in Book IV chapter 4 is one that would clearly have interested Berkeley very much. Locke seeks in this chapter to dispel what seems to be an obvious objection to his account of knowledge. If knowledge is to be understood, as Locke maintains, to consist in the agreement and disagreement between ideas, then is there any difference between the products of the imagination and real knowledge? "Where is the Head," Locke imagines an opponent asking, "that has no *Chimeras* in it? Or if there be a sober and a wise Man, what difference will there be, by your Rules, between his Knowledge, and that of the most extravagant Fancy in the World?" (*ECHU*, 4.4.1) Locke proposes in this chapter to lay these worries to rest, and to show that, his account of knowledge as consisting in relations among ideas notwithstanding, it is still possible, as he puts it, to go "a little further than bare Imagination." (*ECHU*, 4.4.2) Locke promises a criterion that will enable us to tell when our ideas "agree with Things." (*ECHU*, 4.4.3) This is clearly a matter that will strike Berkeley as important, for he conceives his own theory as open to the same objection. As he puts it in the mouth of Hylas, he too must answer the question that "according to your notions, what difference is there between real things and chimeras formed by the imagination, or the visions of a dream, since they are all equally in the mind?" (3DIII 235) The question for us now is, what did Berkeley make of Locke's answer to this problem?

Locke proceeds in a very characteristic manner, by dealing, in order, with the categories of ideas that are important to him, namely, simple ideas, ideas of mixed modes and ideas of substances. The answer to the question, how can we

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3 Further evidence for this position has been provided by Brykman, Genevieve. "L'hétérogénéité des idées et le 'langage de le Nature' chez Locke et Berkeley." In *Berkeley: langage de la perception et art de voir*, edited by Dominique Berlioz, Presses Universitaires de la France, 2003.

tell that our ideas agree with things, is going to be different for each category of ideas, for reasons which he has laid out most extensively in the preceding book. In that book, Locke distinguishes between two sorts of essence, the real and the nominal essence. The real essence, or what Locke also says is the original sense of essence is "the very being of any thing, whereby it is what it is. And thus the real internal, but generally in Substances, unknown Constitution of Things, whereon their discoverable Qualities depend, may be called their *Essence*." (*ECHU*, 3.3.15) This original use of essence applies only to particulars, but, Locke tells us, this sense of essence became perverted by the Scholastics to another use, that of distinguishing things into sorts or kinds, that is, genera and species. All members of the same species share the same essence and the essence delineates what is necessary to be a member of that species. "But," Locke says,

> . . . it being evident that Things are ranked under Names into sorts or *species*, only as they agree to certain abstract *Ideas*, to which we have annexed those Names, the *Essence* of each *Genus* or Sort, comes to be nothing but that abstract *Idea* which the General, or Sortal . . . Name stands for. (*ECHU*, 3.3.15)

This second use of essence, to sort things into kinds, Locke calls the nominal essence. While Locke lays out his distinction among essences in historical or scholastic terms, it is possible to think of his two kinds of essences in terms of Locke's own distinction between ideas and qualities. Thus, the nominal essence is the abstract idea we use in sorting, while the real essence is that set of qualities on which our ideas depend. It is going to turn out that these different sorts of essences behave differently, depending upon the kind of idea we are dealing with. In the case of simple ideas, Locke says that the real essence is the same as the nominal essence, and the same is true for ideas of mixed modes, like jealousy, adultery or triangle. In the case of ideas of substances, however, the nominal essence is other than the real essence. These facts about essences are going to be important to the question, how do we tell that our ideas agree with things? That the relationship between essences differs will help explain why we give different answers, and answers with different implications in each of the three cases.

The first sort of ideas Locke considers, simple ideas, are such that we can be absolutely certain that they agree with the reality of things. This is so for a very simple reason: We cannot make up simple ideas. The only way in which we can know the color chartreuse or the taste of a kumquat is to have the idea chartreuse or the idea of kumquat flavor. Such ideas cannot be the product

of the imagination because there is no imaginative activity that can result in our having a simple idea we have never had before. We must passively receive them. "From whence it follows," Locke writes,

> ... that *simple* Ideas *are not fictions* of our Fancies, but the natural and regular productions of Things without us, really operating upon us; and so carry with them all the conformity which is intended; or which our state requires: for they represent to us Things under those appearances which they are fitted to produce in us: whereby we are enabled to discern the sorts of particular Substances, to discern the states they are in, and so to take them for our Necessities, and apply them to our Uses. (*ECHU* 4.4.4.)

Every simple idea is real, not because that idea is like or shows us the nature of some real thing, but merely because without the presence of something real, external to ourselves, we would not have the ideas, in their variety, we have been fitted to receive. A simple idea is real, of real existence, because it agrees with and answers to that existence external to the mind on which it depends.

So far, and with respect to simple ideas, there is nothing in Locke's account with which Berkeley would disagree. In fact, Berkeley adopts Locke's criterion for the reality of simple ideas quite directly. In *Three Dialogues*, Berkeley has Philonous answer Hylas's question about distinguishing ideas of real things from ideas of the imagination by saying: "The ideas formed by the imagination are faint and indistinct; they have besides an entire dependence on the will. But the ideas perceived by sense, that is, real things, are more vivid and clear, and being imprinted on the mind by a spirit distinct from us, have not a like dependence on our will." (3D111, 235. See also *PHK* 28, 29) Like Locke's, Berkeley's distinction between ideas of the imagination and ideas of real things relies heavily on our passivity with respect to ideas of real things. Ideas of the imagination are the product of our own volition, but our volition is powerless with respect to ideas of sense. Berkeley, too, concludes that ideas of sense have an origin that is independent of us. Berkeley is adopting Locke's criterion quite straightforwardly.

One might very naturally want to say at this point that Berkeley is not really adopting Locke's criterion, because he also claims that the external origin of our ideas of sense is "a spirit distinct from us." This is not at all what Locke had in mind when he talked about simple ideas as being the "natural and regular productions of Things without us." Locke is talking about qualities or powers existing in bodies without us, which produce the ideas in us, so that, to

Locke, the real existence of ideas is a matter of their depending upon the real existence of qualities in bodies. It is certainly true of course that Locke holds that the reality of ideas stems from our passivity with respect to the qualities of bodies, and not to their resemblance to the qualities of bodies, so thus far, Locke and Berkeley are in agreement. But, surely, it might be said, Locke otherwise has a very different notion of what it is for simple ideas to answer to real things.

On Locke's account, what simple ideas agree to is some set of qualities that belongs to bodies and is capable of giving rise to specific simple ideas in us. On many readings of Locke, this is to say that what really exists to which the simple idea answers is that set of qualities, or, as is often said, that inner constitution on which the simple idea depends. It is this real inner constitution that a simple idea, like red, is thought to represent. Locke and Berkeley not only diverge when it come to the nature of the external existence on which our sensible ideas passively depend, but, it might be said, they diverge in ways that have clear and distinctive consequences. For if, on Locke's account, I see red because of the presence of that inner constitution capable of giving rise to the idea of red in me, then my really seeing red requires the actual presence of that inner constitution. Locke, that is, has a way of distinguishing between really seeing red and only apparently seeing red that is not available to Berkeley. On the other hand, Locke is also, it would seem, open to Berkeley's challenge: if all we are acquainted with are ideas, how do we know they agree with things? How do we know that when we see red, the inner constitution specific to red is present?

This final set of questions is, however, based on a serious misconception of Locke's position, and when this misconception is cleared up, Locke is neither open to Berkeley's challenge, nor are the two positions as far apart as might initially seem. For Locke does not equate an idea's being really red with its agreeing with some external realization of red. More particularly, he does not identify what it is to be really red with any external existence at all. This fact emerges from the way in which Locke talks about real and nominal essences of simple ideas. What Locke says is that, with respect to simple ideas, the real essence and the nominal essence are the same. The real essence of a simple idea like red, that is, that "whereby it is, what it is" just is the nominal essence, that is, the abstract idea to which we attach a name. Simple ideas like red are indefinable. Everything that is our knowledge of what red is is contained in the content of the presentation of red. So an idea is really red just when it matches that idea framed by abstracting red from an occurrence of red. The sort or kind or species of red is constituted by these matching judgments between ideas. This is the sense in which the nominal essence, the abstract idea, is the real

essence, that which constitutes the very being of anything. Locke spells this out using as an example the simple idea of light:

> Those who tell us, that *Light* is a great number of little Globules, striking briskly on the bottom of the Eye, speak more intelligibly than the Schools: but yet these Words never so well understood, would make the *Idea*, the word *Light* stands for, no more known to a Man that understands it not before, than if one should tell him, that *Light* was nothing but a Company of little Tennis-balls, which Fairies all day long struck with Rackets against some Men's Foreheads, while they passed by others. For granting this explication of the thing to be true; yet the *Idea* of the cause of *Light*, if we had it never so exact, would no more give us the *Idea* of *Light* it self, as it is such a particular perception in us, than the *Idea* of the Figure and Motion of a sharp piece of Steel, would give us the *Idea* of that Pain, which it is able to cause in us. (*ECHU* 3.4.10)

What it is to be light is constituted by the idea we have of light, and that is independent of the nature of the external existence on which the idea depends.

In the theory Locke has laid out, therefore, there is no room for a theory of misrepresentation with respect to simple ideas. Every time we have an idea of red, we are committed to the existence of something to which the idea answers and which constitutes the reality of that idea. Any idea of red indicates the presence of something adequate to give rise to it or we could not have the idea. But Locke's account of what it is to be red does not require that each occurrence of red indicate the presence of the *same* something with which some other simple idea of red might agree. Locke is committed to nothing more than that which forms the ground of "natural and regular productions of things without us", and he is clear that no account of these grounds enters into what it is to be real simple ideas. So, as Lex Newman points out[4] there is nothing among Locke's commitments to rule out Berkeley's more specific immaterialism, since Locke's account of the reality of simple ideas does not even require a commitment to a material basis of ideas. If we ask then, what Berkeley would have said about Locke's account of the reality of knowledge of simple ideas, it seems that he would not find much to quarrel with. Berkeley adopted Locke's passivity argument for the reality of knowledge of simple ideas almost without alteration. Perhaps more strikingly, he would have found in Locke a way of

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4 Newman, Lex. "Locke on Sensitive Knowledge and the Veil of Perception—Four Misconceptions." *Pacific Philosophical Quarterly*, 85 (2004), pp. 273–300.

understanding the kinds or sorts of things that are red constructed as a relation among ideas, and not as a relation between ideas and some specific external criterion.

The second category that Locke takes up are ideas of mixed modes, of which the most important are mathematical ideas, like line or triangle, and moral ideas, like murder or justice. Just like simple ideas, Locke holds that we can have certain real knowledge of ideas of mixed modes, but in this case, not because we can't make them up, but because we *must* make them up. He says: "*all our complex* Ideas, *except those of Substances*, being *Archetypes* of the Mind's own making, not intended to be Copies of any thing, nor referred to the existence of any thing, as to their Originals, *cannot want any conformity necessary to real Knowledge.*" (*ECHU*, 4.4.5) Because ideas of mixed modes are framed with no external constraints, but are only limited by our own intentions in framing them, they too, like simple ideas, cannot misrepresent. A triangle just is whatever is described by the complex set of ideas we have put together. We can be certain that anything that conforms to our idea of a triangle is a real triangle and everything provable of a triangle is true of it. On the other hand, should we encounter a figure in nature of which some but not all of the things true of a triangle are true, then this figure is not a real triangle. For this reason, all our mathematical knowledge is certain real knowledge and, for the same reason, all our moral knowledge is certain real knowledge. Locke writes:

> If it be true in Speculation, *i.e.* in *Idea*, that *Murther deserves Death*, it will also be true in Reality of any Action that exists conformable to that *Idea* of *Murther*. As for other Actions, the Truth of that Proposition concerns them not. And thus it is, for the other Species of Things, which have no other Essences, but those *Ideas*, which are in the Minds of Men. (*ECHU*, 4.4.8)

There is no way we can go wrong in determining that our ideas answer to the world. They answer to the world because we say they do.

Locke expresses this point in a characteristic way. He says that in the case of ideas of mixed modes, as in the case of simple ideas, the real essence and the nominal essence is the same. While at first glance, this might seem puzzling, since it might seem that an idea framed without any external constraints has no real essence, the discussion of the case of simple ideas makes plain what Locke had in mind. We can certainly associate a nominal essence with an idea of a mixed mode, for this is just the abstract idea delineating the sort to which the name is attached. So whatever set of ideas is attached to the name "triangle" or the name "murder" is the nominal essence. If the nominal essence

and the real essence are the same, then the nominal essence is also "the very being of anything, whereby it is what it is." As Locke says,

> Thus a Figure including a Space between three Lines, is the real, as well as nominal *essence* of a Triangle; it being not only the abstract *Idea* to which the general Name is annexed, but the very *essentia*, or Being, of the thing it self, that Foundation from which all its Properties flow, and to which they are all inseparably annexed. (*ECHU*, 3.3.18)

The nominal essence, in the case of mixed modes, is not just the abstract idea that tells you what to look for in identifying things of that sort, but it also gives you the capacity to identify what other properties necessarily belong to things of that sort. To talk about the real essence is not to talk about some external basis, as the example of simple ideas showed. Instead, as the example of the triangle lays out, it is to talk about the necessary basis for all the properties of a thing or sort of thing, that on which they depend. Everything that is or can be known about a mixed mode is constituted by and follows from the idea we put together.

It might be thought that, while there is nothing in Locke's discussion of mixed modes with which Berkeley would want specifically to take issue, the entire section is nevertheless tangential to the matter of representative realism. So it might be thought that there is nothing that would have caught Berkeley's attention so as to have formed part of his nice discussion. There is one hint, however, that raises the possibility that this is not the case, and that in fact there may have been something in this section that may have been quite important to Berkeley. This hint is that, in his Notebooks, Berkeley put two marginal signs against the entry about Book IV, chapter 4. The first was an 'X' which typically indicates entries Berkeley considered useful for the *New Theory* but the second was an 'Mo' which stands for 'Moral Knowledge'. The choice of this sign is a little surprising, since, if Berkeley had intended his discussion of Book IV, chapter 4 to provide fuel for his attack on representative realism, one might have expected instead an 'M' for matter. Locke's discussion of moral knowledge occurs, of course, in the section just canvassed on ideas of mixed modes. A further notebook entry provides at least a suggestion of what Berkeley might have had in mind. *PC* 536 reads: "ffruitless the Distinction twixt real and nominal essences." (This entry is marked with an 'N' for natural philosophy.) One might imagine that what Berkeley is fastening on here is Locke's claim that moral knowledge is certain real knowledge because the ideas involved in moral knowledge are such that their nominal and their real essences are the same. All moral knowledge is real knowledge

because whatever conforms to a moral idea is an instance of that idea. The reality of moral knowledge is thus determined by relationships among the ideas involved, and not by anything external to these ideas. What the ideas answer to, that provides the criteria of the reality of the knowledge expressed in these ideas, are further ideas. Criteria of this sort obtain when, according to Locke, there is no distinction between the real and the nominal essence. So, the suggestion is that Berkeley thought that lessons were available from Locke's treatment of certain, real moral knowledge that had applications for natural philosophy, which have to do with real knowledge as a relationship among ideas.

Locke's own understanding, of course, of the reality of knowledge with respect to the kinds of ideas that play a role in natural philosophy comes in the third part of his account, that concerning ideas of substances. Locke's position with respect to the reality of our knowledge of ideas of substances is initially quite negative. Since our ideas of substances are intended to capture something external existing in nature, there is room for failure. To the extent that our ideas vary from the things they represent, "they may, and often do fail of being exactly conformable to Things themselves." (4.4.11) Unlike simple ideas and ideas of mixed modes, the having of an idea is not enough for us to have real knowledge, because ideas of substances must also conform to the things they represent. In the case of complex ideas of substances, the distinction between the existence of the idea and the existence of the thing it represents becomes important, and has, as a consequence that ideas may not conform to things. "The reason whereof," Locke writes,

> . . . is because we knowing not what real Constitution it is of Substances, whereon our simple *Ideas* depend, and which really is the cause of the strict union of some of them one with another, and the exclusion of others; there are very few of them, that we can be sure are, or are not inconsistent in Nature, any further than Experience and sensible Observation reaches. (4.4.12)

As Locke elsewhere tells us, in the case of complex ideas of substances, the real essence is not the same as the nominal essence. If we knew the real essence, we would know the very being of a thing, that on which all its properties necessarily depend, and from which they flow. We would know, that is, which properties a thing necessarily has and which it cannot have. But all we in fact know is the nominal essence, an abstract idea derived as Locke says from experience and sensible observation. We frame these ideas based on ideas of qualities observed to go together and there is, under these circumstances, plenty of

room to mistakenly include some ideas which actually do not always go constantly together with the rest or to fail to include others which do and hence to fail to conform to things. So far, the thrust of Locke's account of real knowledge of ideas of substances is largely skeptical.

Locke does not leave the matter there, however, but goes on to argue for a limited real knowledge with respect to ideas of substances. That our ideas of substances are constructed from ideas we have found to go together in experience provides a basis for an attribution of real knowledge. He says:

> Herein therefore is founded the *reality* of our Knowledge concerning *Substances*, that all our complex *Ideas* of them must be such, and such only, as are made up of such simple ones, as have been discovered to co-exist in Nature. And our *Ideas* being thus true, though not, perhaps, very exact Copies, are yet the Subjects of *real* (as far as we have any) *Knowledge* of them. Which (as has been already showed) will not be found to reach very far: but so far as it does, it will still be *real Knowledge*. (4.4.12)

Insofar as each simple idea is an instance of real knowledge, so too will be a co-existing set of ideas. Locke makes a similar point a little further on in Book IV, with respect to sensitive knowledge:

> In fine then, when our Senses do actually convey into our Understandings any *Idea*, we cannot but be satisfied, that there doth something at that time really exist without us, which doth affect our Senses, and by them give notice of itself to our apprehensive Faculties, and actually produce that *Idea*, which we then perceive: and we cannot so far distrust their Testimony, as to doubt, that such Collections of simple *Ideas*, as we have observed by our Senses to be united together, do really exist together. (4.11.9)

If we are passive in the reception of a single simple idea, we are equally passive in the reception of a collection of simple ideas. We can be equally certain therefore that the collection of ideas conforms to something in nature adequate to produce them as a unity. Locke adds, moreover, that, if such a unity has existed in nature once, we can know it is possible for it to exist again. So, despite our undoubted ignorance of the real essence of gold, say, if we apprehend the ideas of body, yellow, fusible and malleable, we know that there is something existing in nature to which these ideas all conform.

At this point in the argument, it looks as though Locke is, in 4.4 putting forward a version of representative realism with which Berkeley presumably

will need to disagree. But I think this is going a little too fast. I think there is one more positive lesson that Berkeley might have been able to learn. To see this, we need to ask, when Locke has shown that a collection of ideas such as body, yellow, fusible and malleable conforms to some real existence, has he shown that something described by our abstract idea of the substance, gold, conforms to a real existence? And the answer to that question, as revealed by Locke's next remark in 4.11.9 is, no. Locke goes on to say: "But *this Knowledge extends as far as the present Testimony of our Senses*, employ'd about particular Objects, that do affect them, *and no farther*." I have real knowledge only of the existence of the collection of ideas presently being apprehended. Such a collection constitutes evidence on the basis of which I construct an idea of a substance, but is not itself such an idea. Before I have an idea of a substance, I need to observe that the collection in question is one that not just goes together but goes *constantly* together. A collection that has existed can recur, can exist as a unity again. It is only when I have observed this additional temporal dimension, of collections that recur, that I construct an idea of a substance by adding to the idea of a collection of qualities the idea of a substance or substratum on which the qualities depend. Locke's account of the psychological process by means of which we construct ideas of substances is more complicated than just passively receiving collections of ideas. That being the case, the extent of our real knowledge of substances will be correspondingly limited. We can know that a collection of ideas agrees with something in nature, but we cannot know that some persisting object or certainly that some kind of object exists in nature. To signal this fact, ideas of substances include, in addition to recurring collections of ideas, the dummy concept of substance or substratum. There is something in nature on which our ideas depend but we don't know what it is. Our ideas therefore do not and cannot conform to this dummy concept. So, the presence of the collection, body, yellow, fusible and malleable can tell us something real exists, but it cannot tell us that real gold exists.

Locke does have a way of answering the question, is this real gold, but it is a way that reflects the fact that the question is about a nominal essence, albeit a nominal essence of a particular sort. Because the question is about a nominal essence, then the stuff in question is real gold when it conforms to the idea in question, and it is not real gold when it fails so to conform. So far, that is, the situation with respect to ideas of substances is very similar to that of ideas of mixed modes. We make our ideas and then look to see what agrees with them. But the rules by which we make ideas of substances differ and introduce additional normative constraints that do not obtain in the case of ideas of mixed modes. The nominal essence we are constructing in the case of

ideas of substances is intended to capture something existing in nature, even though it does not do this by capturing the real essence. What instead constrains the attempt to capture something existing in nature is Locke's 'going-constantly-together' rule, which, in turn, is justified by the unity principle. Because whatever has once had a union in nature can be unified again, we look for persisting unities by looking for ideas that go constantly together. A better or more adequate idea will be one that contains more of the ideas that go constantly together and that doesn't contain ideas that fail to recur with the rest. This rule therefore will shape the construction of an idea of a substance like gold and hence will have a role in determining what is or is not real gold. What justifies the application of the rule is the supposition of a real substantial union existing in nature, but the nature of this real union is unknown. The application of the rule for constructing ideas of substances remains open-ended. We are never in a position to say that the nominal essence agrees with the real essence. But what is important to notice here is that the rules are entirely expressed in terms of the behavior of ideas, it is only the justification for the rule that refers to things other than ideas.

Locke's position with respect to our ideas of substances is therefore multi-faceted, and we can therefore expect that what Berkeley would have said about Locke's position would be similarly complex. Straightforwardly, Locke says that ideas of substances often fail to conform to things. This looks like a skeptical position, of the kind that Berkeley, also quite straightforwardly, rejects. In *PHK* 86, for example, he says that it is the supposition that there is a twofold existence of things, in and without the mind, that:

> . . . is the very root of *scepticism*; for so long as men thought that real things subsisted without the mind, and that their knowledge was only so far forth *real* as it was conformable to *real things*, it follows, they could not be certain that they had any real knowledge at all. For how can it be known, that the things which are perceived, are conformable to those which are not perceived, or exist without the mind?

If Locke is a person who was committed to the two-fold existence of things, and if Locke held that we lacked real knowledge of things to the extent that our ideas failed to conform to things, then Locke is a target of this passage. He is just such a skeptic as Berkeley is describing. End of story.

The story cannot end just here, however, because in Book IV, chapter 4 Locke does endorse a kind of real knowledge with respect to ideas of substances, but of a very limited sort. He doesn't suppose that I have knowledge of the real existence of substances to which my ideas of substances conform,

but he does suppose that I do have real knowledge of the *evidence* that I use in constructing ideas of substances, namely simple ideas and collections of simple ideas. Berkeley too of course wants to assert he has real knowledge of the simple ideas and collections of simple ideas that constitute Locke's evidence. Berkeley also of course endorses Locke's 'going-constantly-together' rule for the construction of ideas of substances. This is clear from the famous "Lockean" opening paragraph of the *Principles*, where Berkeley says: "Thus, for example, a certain colour, taste, smell, figure and consistence having been observed to go together, are accounted one distinct thing, signified by the name *apple*." (*PHK* 1) It is clear, moreover, that when Berkeley's use of the 'going-constantly-together' rule recurs in *Three Dialogues*, he takes the rule to have important implications. Consider this passage from the Third Dialogue: "Strictly speaking, Hylas," says Philonous,

> . . . we do not see the same object that we feel; neither is the same object perceived by the microscope, which was by the naked eye. But in case every variation was thought sufficient to constitute a new kind or individual, the endless number or confusion of names would render language impracticable. Therefore to avoid this as well as other inconveniencies which are obvious upon a little thought, men combine together several ideas, apprehended by divers senses, or by the same sense at different times, or in different circumstances, but observed however to have some connexion in Nature either with respect to co-existence or succession; all which they refer to one name and consider as one thing. Hence it follows that when I examine by my other senses a thing I have seen, it is not in order to understand better the same object which I had perceived by sight, the object of one sense not perceived by the other senses. And when I look through a microscope, it is not that I may perceive more clearly what I perceived already with my bare eyes, the object perceived by the glass being quite different from the former. But in both cases my aim is only to know what ideas are connected together; and the more a man knows of the connexion of ideas, the more he is said to know of the nature of things. (3DIII, 245)

The 'going-constantly-together' rule in this passage as before makes its appearance in the context of a discussion of how to frame general ideas, or, in Locke's terminology, nominal essences. But, by the end of the quotation, it is also figuring as part of an account of how to enlarge our knowledge. "The more a man knows of the connexion of ideas, the more he is said to know of the nature of things."

It is in this transition that I think we can observe Berkeley both learning from Locke and parting company with Locke. Berkeley has learned from Locke that our knowledge of things is expressed in ideas that we ourselves construct by observing which ideas in our experience are connected together. And he has also learned from Locke that, in those circumstances where we do not recognize a two-fold existence of ideas and things, we have certain, real knowledge. Where he parts company with Locke therefore is in the justification of the going-constantly together rule, where Locke explicitly endorses a twofold existence in his appeal to an unknown substantial union, or real essence. Berkeley needs another reason to justify the claim that "the more a man knows of the connexion of ideas, the more he is said to know of the nature of things." Berkeley finds such a justification, of course, in his appeal to the Laws of Nature. That is, the reality of sensible ideas, and their difference from ideas of the imagination, is guaranteed for us, not just because they occur independent of our will, but also because they are orderly. *PHK* 30 lays this out:

> The ideas of sense are more strong, lively, and distinct than those of the imagination; they have likewise a steadiness, order and coherence, and are not excited at random, as those which are the effects of human wills often are, but in a regular train or series, the admirable connexion whereof sufficiently testifies the wisdom and benevolence of its Author. Now the set rules or established methods, wherein the mind we depend on excites in us the ideas of sense, are called the *Laws of Nature*: and these we learn by experience, which teaches us that such and such ideas are attended with such and such other ideas, in the ordinary course of things.

Berkeley has, in this appeal to the Laws of Nature, given a justification for the going-constantly-together rule that does not depend upon an appeal to the two-fold existence of ideas and things. He is not assuming that the ideas that go constantly together are the ones that are united in some real essence. Instead, he is suggesting that coming to know the nature of things does not require coming to know some nature or essence, but instead is a matter of picking out or recognizing lawful connections, on the basis of which, he points out, we come to rest those predictions by which we govern our lives. Berkeley, that is, is endorsing a process of constructing ideas of things which makes no distinction between nominal and real essences. Berkeley might be said to have learned from Locke that we have certain real knowledge whenever the ideas we construct provide the criterion for their application.

If my reconstruction of what Berkeley might have said about Locke's Book IV chapter 4 has any merit, then it seems that Berkeley might have found

a good deal more to say about Locke's views on the reality of knowledge than is found in his familiar rejections of representative realism. This is because, as I have argued, Locke's position as laid out in Book IV chapter 4 is itself quite other than the broad brushed representative realism that has sometimes been ascribed to him. Instead, what emerges is an argument for real knowledge that circumscribes its extent in a very limited manner. Locke's project is as much about the importance of the general ideas we construct and about their differences from the qualities on which they depend as it is about the possibilities of real knowledge. Read in this way, Locke's account of real knowledge does not provide much of a target for an immaterialist like Berkeley, but it does provide Berkeley with many useful lessons to be learned. The only reason not to suppose that Berkeley did in fact learn these lessons is an antecedent conviction that Locke is the target of Berkeley's arguments. It is this conviction, however, that is unsupported by the texts. Locke and Berkeley have been melded together in the philosophical mind as Representative Realist-and-Idealist-Critic. But, if there is in fact a lesson to be learned from my discussion, it is that a much richer understanding of both Locke and Berkeley is available if we do not assume that the one is a target for the other. This is, of course, a historiographical lesson, but given the centrality of Locke and Berkeley to our picture of the debate over representative realism, there is a promise of further lessons to emerge.

Berkeley on the Language of Vision and the Rules of Visual Signification

Martha Brandt Bolton

During the 18th and much of the 19th centuries, George Berkeley was best known for his contribution to what we would call the psychology of vision. This is the topic of his first published work, A *New Theory of Vision* (1709), and a subsequent essay, *Theory of Vision Vindicated* (1732). Both treatises marshal empirical evidence in support of an innovative account of the mental process that produces visual perception of the spatial properties of things. The problem this addresses had long been recognized in optical theory: when we see, we receive information about the objects in view primarily on the retinas of the eyes; but the retinal data underdetermine the distance of the object viewed from the perceiver, as well as its size.[1] To get a sense of why this fact was recognized in Berkeley's time, think of it this way. Kepler had shown that from each point on the viewed surface of an object, a pencil of light rays travels through the pupil and into the lens, which focuses the rays at a point on the retina; points of retinal stimulation correspond one-to-one to points on the viewed surface. The distance of the viewed object, alone, does not affect the pattern of retinal stimulus.[2] The rays coming from a body of a certain size at a certain distance from the viewer focus on the same area of the retina as rays from a larger (smaller) body at a greater (lesser) distance; the retinal image does not register the difference. It is true that an object traces discrepant images on the two retinas, but this alone does not fix the distance at which the object is typically seen. (A stereoscopic image appears to be three dimensional, but it does

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1   For a full account of Berkeley's work in this area, see Atherton, Margaret. *Berkeley's Revolution in Vision*. Ithaca: Cornell University Press, 1990.

2   Berkeley puts it this way: 'For distance being a line directed end-wise to the eye, it projects only one point in the fund of the eye, which point remains invariably the same, whether the distance be longer or shorter.' NTV, sec. 2. Except for *Alciphron*, the editions of Berkeley's works used in this article are those in Berkeley, Georege. *Philosophical Works including the Works on Vision*. Ed. Michael Ayers. London: Dent, 1975. Alciphron is taken from Berkeley, George. *The Works of George Berkeley, Bishop of Cloyne*. Ed. A.A. Luce and T.E. Jessop. London: Nelson, 1950, vol. 3. In citing these works, the following abbreviations are used: *New Theory of Vision* = NTV, *Theory of Vision Vindicated and Explained* = TVV, *Treatise concerning the Principles of Human Knowledge* = PHK, *Three Dialogues between Hylas and Philonous* = TD, *Alciphron* = Alc.

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not appear to be at any particular distance or of any particular size.) Yet in fact, we do manage to see how far away things are and what size they are, and the problem is to explain how. Evidently, the perceiver supplements the information conveyed by the retinal images—but where does the information come from, what sort of information is it, and how is it used in the mental process which ends in visual perception of distance, and so on?

The established theory, advocated in various versions by Kepler, Descartes, Barrow, and others, was drawn from geometrical optics. To get the gist of it, look at a point on the surface of an object directly in front of you. Two lines of sight, one from each eye, converge at this point.[3] Consider a straight line from one eye to the other across the bridge of your nose; this line and the two lines of sight form an isosceles triangle, and there is a simple geometrical theorem to the effect that the altitude of this triangle (distance of the perceiver from the viewed surface) varies directly as the size of the two base angles. According to the received visual theory, the mind feels the angles of the lines of sight, tacitly knows the distance between the eyes, and uses this information to gauge the distance of the object, all without the perceiver's being aware of it. Berkeley agrees that this generally gets the right result, but denies the reality of the lines, angles, and unconscious reasoning. In place of them, he proposes that the additional information required to apprehend distance and size by sight is absorbed in the course of experience; no unconscious processing is involved, just a learned association. Berkeley's explanation assumes that a viewer senses an array of light and color that is directly registered from patterns of stimulation on the retina. The regular correspondence of sorts of retinal events and sorts of visual sensations involves no mental processing. Berkeley supposes that the visual faculty untutored by experience apprehends nothing but these visual correlates of retinal activity. Light and colors are the 'immediate and proper' objects of sight, as Berkeley calls them. In the course of experience, differences among visual arrays and other cues are found to co-vary with differences in the sizes of tangible objects and their distances from the viewer.

It is Berkeley's theory that we learn to see distance, size, and figure by mastering such correlations. NTV consists largely of identifying the operative cues. In fact, Berkeley is able to show that this theory is better confirmed than the alternative geometrical account. Isaac Barrow performed an experiment whose result, as he pointed out, was not explained by the geometrical theory of vision. The Berkelian theory correctly predicts the experimental result, as we

3   In effect, the psychological account of vision reverse engineers the physical account of the path of light rays from the object to the retina, which invokes principles of geometry.

will see in more detail below.[4] It also offers plausible explanations of a number of other visual phenomena, so it dominated theory of vision for well over a hundred years.[5]

This does not exhaust Berkeley's account of visual perception, however, for he claims the explanatory theory shows that vision constitutes a language.[6] This claim is introduced near the end of NTV: 'We may fairly conclude that the proper objects of sight constitute an universal language of the Author of nature, whereby we are instructed how to regulate our actions...' (NTV, sec. 147).[7] At this point, it may not be clear whether this claim is an implication drawn from the visual theory exposited earlier in the work or, instead, a way of expressing the theory, itself. We might take the explanatory theory to be a premise for a version of the familiar argument from design for the existence of God.[8] But TVV suggests the latter, that the explanatory theory incorporates the language doctrine. The later treatise adopts a unique order of exposition; as Berkeley puts it: 'I shall... now begin with that conclusion, that *vision is the language of the Author of Nature*, from thence deducing theorems and solutions of phenomena, and explaining the nature of the visual faculty.' (TVV 38). So even though the language thesis is not an explicit tenet of the explanatory apparatus presented in 1709, we might expect to find that it includes principles that suffice to establish the language thesis. In this paper, I consider the extent to which the theory of vision does confirm the language thesis. At the same time, I hope to clarify the relation between the rules of visual signification and

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4   NTV sec. 29–31; for more on this and other aspects of the geometrical theory and Berkeley's critique, see Atherton, *Berkeley's Revolution in Vision*.

5   There are even twentieth century admirers, see Atherton, p. 4 and Egan, Frances. "The Moon Illusion." *Philosophy of Science*, 1998, pp. 604–23.

6   Useful discussions of Berkeley's language analogy can be found in: Turbayne, Colin. "Berkeley's Metaphysical Grammar." In *Berkeley: Critical Assessments*. Edited by Walter E. Creery, London: Routledge, 1990, v. 1, pp. 50–73; Land, S.K., "Berkelian Linguistics." Ibid., pp. 86–110; McGowan, William. "Berkeley's Doctrine of Signs." Ibid., pp. 111–25.

7   The language doctrine is also briefly mentioned in NTV 140.

8   This interpretation is urged by King, Edward G. "Language, Berkeley and God." In *George Berkeley: Critical Assessments*. Ed. Walter E. Creery. London: Routledge, 1991, v. 1, 39–49; Hooker, Michael. "Berkeley's Argument from Design." In *Berkeley: Critical and Interpretive Essays*. Edited by Colin Turbayne. Minneapolis: University of Minnesota Press, 1982, pp. 261–72; briefly in Winkler, Kenneth P. "Berkeley and the doctrine of signs." In *Cambridge Companion to Berkeley*. Edited by Kenneth P. Winkler. Cambridge: CUP, 2005, pp. 125–65. These accounts give little or no attention to the pragmatic point that a language is used with communicative intention.

what Berkeley calls the 'laws of nature,' which govern the order of events in the sensible world.

1   General Characteristics of a Language

To assess the basis for the language thesis, we need to know what it is for a collection of sensible items to constitute a language, by Berkeley's lights. Several features of language are mentioned in the treatises on vision and the question is explicitly addressed in the dialogue *Alciphron* (1730), which expounds the theory of vision in service of an apology for the Christian religion. Even there, the discussants compile no list, but I think their meaning is captured by the following six general characteristics. I will make some attempt to document Berkeley's commitment to each. Some of the texts to be cited refer to vision alone, but taken in context, they are plainly intended to show that vision is language-like in some crucial respect.

According to Berkeley, a collection of sensible marks forms a language if, and only if, it satisfies all of the following.

i. The marks are apt to be regarded as signs by persons who perceive them. A person regards a mark as a sign if perceiving the mark regularly disposes her to think of what it stands for—in Berkeley's official terminology, perceiving the mark 'suggests' to her what it signifies. Moreover, a person comes to regard a mark as a sign as a result of experiencing it in conjunction with the thing it stands for.[9]

Taken together the following texts provide some confirmation that this is a general characteristic of signs in a language according to Berkeley:

> Words are signs: they do or should stand for ideas, which so far as they suggest they are significant. But words that suggest no ideas are insignificant. (Alc 7.2; *Works* 3.287)[10]

> No sooner do we hear the words of a familiar language pronounced in our ears, but the ideas corresponding thereto present themselves to our minds.... We even act in all respects as if we heard the very thoughts themselves.... So likewise the secondary objects or those which are only

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9   Berkeley apparently assumes that, at least in many instances, we learn what a name stands for by virtue of hearing the name in the presence of what it denominates.

10   Berkeley maintains that words in a language signify ideas, although he denies that the use of a word is always intended to convey this idea to the audience; see below.

suggested by sight, do often more strongly affect us, and are more regarded than the proper objects of that sense. (NTV 51)

Ideas which are observed to be connected with other ideas come to be considered as signs, by means whereof things not actually perceived by sense are signified or suggested to the imagination. (TVV 39)[11]

ii. In general, the relation that grounds the connection between a sign and what it signifies is either resemblance, necessary connection, geometrical inference, or arbitrary institution; but signs *in a language* signify in virtue of the last of these.

The following texts indicate that words in a language satisfy this condition. Speech is 'the arbitrary use of sensible signs, which have no similitude or necessary connection with the things signified . . .' (Alc 4.7; *Works* 3. 149). Again:

In treating of vision, it was my purpose . . . to inquire how one idea comes to suggest another belonging to a different sense, how things visible suggest things tangible, how present things suggest things remote and future, whether by likeness, by necessary connexion, by geometrical inference, or by arbitrary institution. (TVV 14)

iii. The marks are capable of conveying information or content that is true or false, veracious or deceitful, or otherwise subject to evaluation for correctness. In fact, it is a difficult and not unimportant matter to determine the sort of correctness Berkeley has in view. But because there is not space to consider it carefully here, I will assume it is truth or falsity. The following passages express this condition. Language is 'the arbitrary use of sensible signs . . . so as . . . to suggest . . . to my mind an endless variety of things, . . . thereby informing me . . . with regard to things near and present, but also with regard to things distant and future.' (Alc 4.7; *Works* 3.149).

iv. The marks are capable of conveying content that is false or otherwise incorrect. As I see it, this is implied by condition (iii), but it is worth emphasizing that tokens of a visual sign are capable of signifying what is not the case. As Berkeley puts it, ' . . . that one might be deceived by these suggestions of sense . . . we need go no farther than the next looking-glass or pictures to be convinced.' (NTV 45).

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11   NTV, published a year before PHK, does not mention the idealist doctrine that sensible things are nothing but ideas caused in finite spirits by the infinite spirit. In NTV, tangible objects are assumed to be mind-independent. In the later TVV, all sensible things are said to be ideas.

v. Marks that are signs in a language are productive, i.e., a given sign can be modified in ways that yield different signs with different significations or, again, two or more signs may be combined to form a more complex sign standing for something which is not signified by its components taken alone. What it stands for is typically determined partly by the signs it includes and partly by their mode of combination; e.g. 'Berkeley's theory' signifies something different from what is signified by 'Berkeley' and 'theory' and signifies what it does in virtue of the form of the compound construction.

Berkeley's commitment to this requirement is shown by the following:

> [A]ll signs are not language: not even all significant sounds, such as the natural cries of animals, or the inarticulate sounds and interjections of men. It is the articulation, combination, variety, copiousness, extensive and general use and easy application of signs (all of which are commonly found in vision) that constitute the nature of all language. (Alc 4.12; W 3.157)

This is an important text because it explicitly states that there are signs other than signs in a language. All sorts of sensations are signs, according to Berkeley, but only visual sensations are signs *in a language*.[12]

vi. Those who understand what the marks signify have a tendency to respond to a communicative intention involved in the production of tokens of the marks.

Although this is implied by brief remarks in the two theoretical works, as we saw, it is more prominent in *Alciphron*. The following passage is a good example. Language is:

> . . . the arbitrary use of sensible signs, . . . so as . . . by the apposite management of them to suggest and exhibit to my mind an endless variety of things, . . . thereby informing me, entertaining me, and directing me how to act, not only with regard to things near and present, but also with regard to things distant and future . . . (Alc 4.7; *Works* 3.149, partly quoted above)

The emphasis on the pragmatic aspect of language in this dialogue, with its apologetic aim, may call into question whether this requirement has just the same basis in the explanatory theory as the other requirements stated above.

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12   See e.g. TVV 9, 14.

Still, the fact that communicative intentions are mentioned in the works on vision is *prima facie* reason for assuming that the satisfaction of all six requirements are supposed to have the same evidential ground.

This completes the list. The language of vision thesis is, in effect, the claim that vision satisfies these six conditions. To what extent is this true?

2   Evidence of the Linguistic Character of Vision

The visual theory purports to explain perception of the spatial properties of objects. As mentioned, we do not immediately see distance, size, and figure; Berkeley reasons that we do so mediately—by means of what is immediately and properly seen. For ease of discussion, we can identify four components of an act of mediate perception on Berkeley's theory: (a) immediate perception of one or more things, A; (b) a grounding connection between A and something else, B; (c) a mental transition from perception of A to perception of B, which is affected by (b); and (d) mediate perception of B.[13] The model plays directly into the hand of the claim that vision conforms to the first requirement for being a language.[14]

For Berkeley's theory of vision, the main task is to specify (b) and (c). 'Suggestion' is Berkeley's official term for (c). In general: 'That one idea may suggest another to the mind it will suffice that they have been observed to go together, without any demonstration of the necessity of their coexistence ... [N]o sooner is the former idea perceived, but it suggests the latter to our thoughts.' (NTV 25–26) Suggestion is nothing more than an acquired associative tendency. Such tendencies are pervasive in humans, Berkeley claims; if a person has the right sort of experiences, she will learn to associate items of several different sorts—for instance, facial expressions suggest passions, flushing suggests shame, pallor, fear; words in a language suggest what they stand for. Berkeley applies the model to mediate visual perception of distance. The following replaces the explanation by geometrical calculation sketched above:

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13   Based roughly on Allen, James. *Inference from Signs*. Oxford: Clarendon Press, 2001.

14   Berkeley applies the model to all sensory modalities in an effort to explain how we deploy each of the five senses to perceive things that are not proper to it, e.g. we hear tangible things, see things which are hot. But although the perception of anything proper to one sense modality by another sense modality involves signs, this is not sufficient for their constituting a language; see Alc 4.7; *Works* 3.157.

> And *first*, it is certain by experience that when we look at a near object with both eyes, according as it approaches or recedes from us, we alter the disposition of our eyes, by lessening or widening the interval between the pupils. This disposition or turn of the eyes is attended with a sensation, which seems to me to be that which in this case brings the idea of greater or lesser distance into the mind. (NTV 17)

As the passage goes on to say, this is because the mind has 'constant experience' that the diverse sensations felt when the eyes are differently disposed are 'attended each with a different degree of distance in the object'; as a result, the mind forms a 'habitual or customary connection between the two sorts of ideas'; consequently, upon perceiving certain ocular sensations, the mind thinks of the correlated ideas of distance, which is to perceive them mediately (NTV 16–17). This is the first of several visual cues which, the treatise argues, suggest ideas of the different distances and sizes of tangible objects. Accordingly, the theory satisfies requirement (i).

Berkeley's view of the grounding relation, item (b) in the outline of an act of mediate perception, is relevant to deciding whether vision has characteristic (ii) of a language. Texts that describe this relation are scant; NTV tends to say that visual sensations 'suggest' distances, without using the word 'signify'.[15] But the following remark is an exception: 'Visible figures are marks of tangible figures . . . which by nature they are ordained to signify.' (NTV 140). This confirms that *visibilia* are signs, but we would like to know what it is in virtue of which they signify the things they do—what specific basis of visual signification does nature ordain? In the absence of an explicit account from Berkeley, we can surmise a good deal from the theory of vision itself. Of the several sign-signification grounding relations mentioned in characteristic (ii), we can eliminate geometrical relation. Moreover, it is plain enough that sensations of color and light have no salient resemblance to the distances of viewed objects. It might seem more plausible that visual images notably resemble the sizes, figures and motions of tangible things, but NTV argues against this. The proper and immediate objects of sight and touch are entirely heterogeneous, according to Berkeley (see NTV 127–42). Several arguments for this are given. Without attempting to do justice to them, we can sketch two of them here. One such argument is that properly visual arrays and tangible figures are incommensurable; although each can be measured, no unit measures both (NTV 131). Accordingly, they are of different kinds. Again, although some visual arrays

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15   I would urge that for Berkeley, 'suggests' implies 'signifies' in the context of visual theory; see below.

have a few structural features like ones identifiable in the corresponding tangible objects, e.g. the same number of parts in the same order, Berkeley contends that the qualitative dissimilarity between the visual and tactual parts precludes salient resemblance between visual and tactual wholes (NTV 134).

It is more difficult to say whether the grounding relation is a necessary connection, because we first need to determine what counts as such, for Berkeley. There is reason to think the connection is 'necessary' in the relevant sense just in case: it is necessary that if a (token of) a sign exists, then the thing it signifies exists. Moreover, as we will see, the intended sense of 'necessary' turns out to be weaker than logical or geometrical necessity.[16] In light of this, there are two plausible candidates for the ground of mediate visual perception. One is universal co-occurrence: a visual mark signifies a tangible property just in case whenever a (token of) the mark occurs, there is an object with the tangible property in the viewer's line of sight. That is, coexistence of the sign and what it signifies is general, without exception barring miracle. Now this is a contingent connection, not a necessary one, judged by the standard of logical or metaphysical necessity. But taking it to be contingent by this standard makes it too strong for the grounding relation, because it precludes the existence of a token of a visual sign which signifies falsely, i.e. signifies something which does not exist. This conflicts with texts to the effect that visual signs sometimes deceive us.[17] This makes the second option attractive: a type of visual mark signifies a tangible property provided that tokens of the mark co-exist with instances of the property often enough to enable persons who perceive the former to acquire the habit of associating them with the latter. Otherwise, of course, we could not learn to see spatial properties, or pick up on the visual language. But co-occurrence sufficient for purposes of human learning need not be entirely universal, so there may be occasions on which a token visual sign is not accompanied by the sort of tangible object it stands for. This is the account of the grounding relation I want to suggest on Berkeley's behalf. One might object that the choice of the second option rigs the theory of vision in favor of the language doctrine. But the choice is backed by condition (iv). The ability of Berkeley's theory to explain persistent visual illusions is a crucial test of its being correct, as I will argue.

Our more immediate concern is requirement (ii). The analogy with language breaks down unless the grounding relation is arbitrarily instituted. Among 18th century uses of the English word 'arbitrary', the most relevant is its use to mean 'derived from mere opinion or preference; not based on the

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16   See Alc 4.7; *Works* 3.157–8, discussed in detail below.
17   NTV 45, quoted above; and passages in text below.

natures of things.'[18] It is fair to say that the proposed grounding relation is not based on the natures of things; this is because a properly described connection due to the natures of two things would be universal. But opinions and preferences are held by intelligent beings. The arbitrary connection condition seems to require that the grounding relation be determined by one or more spirits, or minds. Yet it hardly seems that such a provision has an essential part in the apparatus of mediate visual perception. The perceptual operation depends on the existence of a grounding relation, but not on its source. Berkeley himself makes this point:

> In certain cases a sign may suggest its correlate as an image, in others as an effect, in others as a cause. But where there is no such relation of similitude or causality, nor any necessary connexion whatsoever, two things, by their mere coexistence, or two ideas, merely by being perceived together, may suggest or signify one the other, their connexion being all the while arbitrary; for it is the connexion only, as such, that causeth this effect. (TVV 39)

References to usage and, above all, the author of nature are the part of the language doctrine for which it is most difficult to find basis in the explanatory theory.

This issue must be confronted when it comes to requirement (vi), but it can be finessed for the present. There is an indirect way of arguing in support of the claim that the grounding relation is arbitrarily instituted, by elimination of other alternatives. Assume that the texts summarized in condition (ii) exhaust the relations in virtue of which a sign may signify the thing it does. We have ruled out two of the connections listed there—geometrical relation and resemblance. If our proposed account of the grounding relation is correct, necessary connection between the existence of token visual sign and the existence of what it signifies is eliminated, as well; for it is possible, indeed actual, that the former exists and not the latter. We can conclude that visual signs stand for the things they do in virtue of an arbitrary connection.

This argument is hostage to the claim that there are no relations in virtue of which a sign might signify a thing other than those mentioned in (ii). The ancient notion of a natural sign shows this to be false; a natural sign stands for

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18   Simpson, J.A., E.S.C. Weiner, and Oxford University Press. *The Oxford English dictionary*. Oxford; Oxford; New York: Clarendon Press; Oxford University Press, 1989.

the thing it does in virtue of being either its cause or its effect.[19] Nowadays, more subtle causal theories of linguistic and mental signification are widely assumed to be correct. To complete the argument, Berkeley needs to show that causality is not the basis of visual signification. There are two moves he might make. The more forceful insists that relations of cause and effect are expressible as universal conditional propositions; thus, the grounding relation would be a necessary connection if it consisted of causality. Another argument can be drawn from Berkeley's idealist metaphysical doctrine that spirits are the only causes. Because visual sensations signify tangible properties of sensible things, the former cannot be related to the latter by cause and effect.[20] Granting all this, the argument from elimination still leaves open the possibility of some other plausible basis of visual signification, but this possibility seems remote. If this is right, we can say that the explanatory theory provides considerable support for the claim that vision conforms to condition (ii).

With regard to (iii), Berkeley typically speaks of perceiving objects, rather than facts, or intentional content expressed in 'that'-clauses. We perceive the size of a man, the distance of a tower, and the like. No doubt he supposes that certain visual sensations prompt a competent visual perceiver to bring to mind the idea of a man of a certain size, a tower at a certain distance, etc. But it is also part of the theory of vision that such ideas are in some way correct or incorrect with regard to the actual situation. Indeed, several important passages put this in the form of a proposition:

> Looking at an object I perceive a certain visible figure and colour, with some degree of faintness and other circumstance, which from what I have formerly observed, determine me to think that if I advance forward so many paces or miles, I shall be affected with such and such ideas of touch ... (NTV 45)

Because Berkeley has an image theory of thought about sensible things, it is a matter of some interest how he might contrive to explain a subjunctive conditional thought. This is a matter to be investigated elsewhere. For our purpose, the passage just quoted is proof enough that vision has characteristic (iii), and we can move on to (iv).

In Berkeley's discourse, occurrences of false visual suggestion are offered as evidence that there is no necessary connection between visual signs and

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19   Berkeley recognizes the doctrine that causal relations are a basis of signification; see TVV 39, 42.

20   It is doubtful that this view of causes is integral to Berkeley's explanatory theory of vision.

the tangible things they stand for (e.g. NTV 45, quoted above). Our previous discussion of condition (ii) brought this into play. The argument is spelled out in *Alciphron*. Here Berkeley's spokesman is Euphranor and Alciphron is his opponent:

> **Alciphron**: Hold! Let me see. In language the signs are arbitrary, are they not?
> **Euphranor**: They are.
> **Alciphron**: And, consequently, they do not always suggest real matters of fact. Whereas this Natural Language, as you call it, or these visible signs, do always suggest things in the same uniform way, and have the same constant regular connexion with matters of fact: whence it would seem the connexion was necessary; and, therefore, ... it can be no language. How do you solve this objection?
> **Euphranor**: You may solve it yourself by the help of a picture or looking glass. (Alc 4.12; W 3.157–8)

Alciphron's argument bears scrutiny. It takes for granted that if visual signs are arbitrary, 'they do not always suggest matters of fact'. Alciphron's thrust is that visual suggestion never deviates from the facts, and this implies a necessary connection between the presence of a visual sign and the existence of what it signifies; but this shows that visual signs are not language-like. Why should Alciphron assume that Berkeley is committed to saying that vision always signifies what is the case? A superficial answer is that he thinks Berkeley would be embarrassed to say that God sometimes speaks to us falsely, visually tells us that such-and-such would happen if such-and-such were to happen, when this is false. But an argument more relevant to Berkeley's theory of vision would go as follows. Alciphron may assume that a visual sign stands for whatever objects in the viewer's line of sight universally accompany tokens of the sign in the order of nature. He may suppose that this is required if the sign is to have signification; perhaps he assumes a sensation cannot signify a thing which does not exist. Further, Alciphron may hold that the order among things in the sensible world is necessary in the nomological sense.[21] This sets up the conflict on which the objection turns. If visual sensations always signify what is the case, then they are not signs in a language; but if they sometimes signify falsely, then they do not signify in virtue of the regular order of things in the sensible

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21 Several passages emphasize the constancy and generality of the laws of nature, but still allow the possibility that God can violate them by creating a miracle in order to make some point; e.g. PHK 61–3.

world, hence, do not signify at all. Berkeley is caught, either way—or so the argument goes. But the argument goes wrong. Euphranor dismisses it with a curt reference to mirrors and *trompe-l'oeil*. Evidently he adheres to the second alternative on which visual signs sometimes signify what is not the case. And although visual sensations and the tangible things they signify are co-present often enough for us to observe them together, their co-existence is not a general rule of order, but only an indirect consequence of the universal order that obtains among sensible things.

Notice that Euphranor does not challenge his opponent's way of construing arbitrary connection, that is, a connection such that a sign sometimes stands for something that does not conform to the facts about existence. I take this to confirm our earlier proposal about the grounding relation which underwrites visual suggestion and signification.

If our analysis of this exchange in *Alciphron* and similar texts is correct, then Berkeley's theory of vision satisfies condition (iv) for being a language. But a very able scholar, Richard Glauser, urges a different account of Berkeley's position.[22] Glauser does not neglect passages to the effect that mirrors suggest that things are located where, in fact, they are not. As he sees it, the falsity is due to a mistaken interpretation of a visual sign. This drives a wedge between suggestion and signification: what a sensation suggests to one or more visual perceivers may not be what the sensation signifies. On this interpretation, suggestion is a matter of how signs are apprehended by individuals, whereas signification has to do with what they stand for whether a particular perceiver knows it or not. So for instance, on Glauser's view, the mirror image of an object visually signifies an object located on the viewer's side of the mirror, where it actually is; but to many viewers, it suggests an object located on the other side of the mirror with left and right sides reversed. Glauser mentions three sources of interpretative error: (a) defective training, i.e. the perceiver was inattentive or negligent in observing the correlation of visual sensations and the tangible distance and size of things; (b) she lacks the requisite praenotions,[23] i.e. knowledge of the sorts of objects seen at the same time, and (c) she fails to take into account 'various other factors' with regard to her present situation, e.g., I suppose, the fact that she is looking in a mirror.

In fact, Berkeley never mentions misreading of visual signs or inept suggestions, nor does he offer to explain them. Indeed, he says the visual language

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22   Glauser, Richard. "La Structure de la perception; médiate dans la théorie berkeleyenne de la vision." In *Berkeley: langage de la perception et art de voir*. Edited by Dominic Berlioz. Paris: Presses universitaires de France. 2003, pp. 103–33.

23   See TVV 59; also NTV 57, 28.

spoken by the author of nature 'is not liable to that misinterpretation and ambiguity that languages of human contrivance are unavoidably subject to.' (NTV 152) More important to his theory, he knows very well that certain visual illusions are persistent; we continue to be affected by them despite knowing that they are illusory. This is just a fact about vision. As such, it is among the phenomena Berkeley's theory purports to explain. Part of the project is to subsume persistent illusions under the general principles of mediate visual perception. To my knowledge, there are no texts to the effect that a visual sensation ever suggests something it does not signify, as if the two sometimes came apart.[24] To be sure, key texts, such as the exchange with Alciphron we considered, frame the discussion in terms of suggestion, not signification; yet Alciphron's argument would have no force against the language thesis if 'suggests' did not imply 'signifies'.[25]

Although I do not believe Berkeley explains visual misrepresentations as incorrect interpretations of signs, he may seem to do just that when he undertakes to supplant the geometrical theory with his account of visual perception. His target is the Barrows experiment mentioned above.[26] In the experiment, a convex mirror is placed several feet in front of a human subject and an object is positioned behind the subject's head in such a way that the subject can see the object reflected in the mirror. Of course the object appears to the viewer to be located in front of her. It also turns out that the visual image falsely portrays the viewed object in another respect: the closer the object is to the back of the subject's head, the more distant it appears to her to be, but still no farther than a few feet away. The geometrical theory of vision was famously unable to account for this appearance. The established view implies that the object will appear to be at an extremely great distance from the viewer, and this will be unaffected by changes in the proximity of the object to the viewer's head. Berkeley's theory explains the apparent location on the basis of a certain visual cue of distance within close range. Think of moving a finger toward your eyes; the closer it comes, the closer it appears to be and, further, the more confused the visual image becomes. This principle explains the Barrow result. When the

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24   Berkeley would hardly deny that it is possible to misunderstand the use of a linguistic expression or a visual cue, but the mental operation involved would not be suggestion, in his technical sense.

25   The following passage equates suggestion and signification: 'Ideas which are observed to be connected with other ideas come to be considered as signs, by means whereof things not actually perceived by sense are signified or suggested to the imagination . . . and in general, all signs suggest things signified . . .' (TVV 39).

26   NTV 29–31.

object is placed closer to the subject's head, she reports that the visual image is less confused and the object appears to be farther away—which is just what Berkeley's principle predicts.[27]

This concerns us because Berkeley uses an analogy with language to describe the situation:

> This case is much the same as if we should suppose an Englishman to meet a foreigner who used the same words with the English, but in a direct contrary signification. The Englishman would not fail to make a wrong judgement of the ideas annexed to those sounds in the mind of him that used them. Just so, in the present case the object speaks (if I may say so) with words that the eye is well acquainted with, that is, confusions of appearance; but whereas heretofore the greater confusions were always wont to signify nearer distances, they have in this case a direct, contrary signification, being connected with the greater distances. Whence it follows that the eye must unavoidably be mistaken, since it will take the confusions in the sense it has been used to, which is directly opposed to the true. (NTV 32)

The visual error is said to be analogous to a situation in which a person misjudges the meaning of a linguistic expression. This might seem to confirm that misperceptions are due to miscarriages of the visual system, which is charged with reading the visual signs.

But just as the language spoken by the foreigner is not English, the language said to be in use in the Barrows case is not the language of vision. The English speaker does not misunderstand words in her own language; instead, she fails to realize that English is not being spoken. In the same way, the subject of the experiment correctly understands the visual language, but because she understands it to say something false, it is like making a mistake about the language in use. What a token of a mark signifies is relative to a language; the same token may signify different things in different languages. In the Barrows experiment, greater confusion may stand for greater distance, but it stands for the opposite in the *language of vision*. According to Berkeley, there is only one such language, constant and invariable: '...[the] language of nature doth not vary in different ages or nations,...[it is the same] in all times and places...'

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27   NTV goes on to say that the optical theory of refraction and reflection implies that the retinal image is less confused when the viewed object is closer to the subject's head; and this accounts for the variability of the confusion of the visual image.

(NTV 140)[28] If a token of a complete visual sign S signifies X in the visual language on one occasion, then a token of S signifies X in that language on every other occasion.[29] Barrow's subject interprets the visual cues as she has learned to do; and she has learned what these cues invariably mean in the language known by competent visual perceivers. Yet in this situation, what they mean in that language is false.

Berkeley uses the reverse-English analogy for a particular purpose, to explain why it seems to the subject of the experiment that she is viewing an object located a few feet in front of her. The immediate point is that his theory of how vision of spatial properties works predicts this result, whereas the competing theory predicts a very different result. But in effect, the experiment creates an illusion that Berkeley's theory successfully explains.

His handling of the moon illusion is a good test of his attitude toward visual deception. That the moon appears larger on the horizon than in the zenith has been known for many centuries during which many explanations have been proposed. Berkeley takes up the project. He describes the phenomena to be explained as a deception: 'The magnitude of the visible moon, or that which is the proper and immediate object of vision, is not greater when the moon is in the horizon than when it is in the meridian. How comes it, therefore, to seem greater in one situation than the other? What is it can put this cheat on the understanding?' (NTV 74).

An acceptable answer will subsume the misleading appearance under established general principles of physics or psychology, or both. We can distinguish between two approaches Berkeley might take. One is to derive the illusion from general principles that explain mediate visual perception in general; that is, the illusion occurs because the visual system is operating just as it always does, reading cues in the same invariant way. I would urge that this is the approach Berkeley takes. A second approach, which accords with Glauser's view, is to explain the illusion on the basis of conditions which affect the process of mediate perception in such a way that the visual cues are mishandled. For this, one would need a general principle of the following form: if a person views an object under conditions C, then the person's visual system is affected by M, which regularly causes it to give a certain misinterpretation to the visual cues. The latter approach would seem to be needlessly complicated. Moreover, because M causes visual sensations to be interpreted as signs of things which

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28   Also NTV 152.

29   According to Berkeley, many visual signs are complex in that what they signify is affected by what the viewer understands about the context in which they are perceived. A 'complete' sign is one that includes all factors that affect what it signifies in the language of vision.

are never observed to accompany them, it is difficult to see how the disruptive effects of M can be explained in terms of an acquired habit of associating ideas; the treatises on vision lay no ground for explaining how M works, if not by suggestion. Moreover, a look at the text confirms that Berkeley proposes an explanation of the first sort.

One traditional explanation of the moon illusion has it that the retinal image of the moon is larger when the moon is seen on the horizon than when viewed in the meridian. This is said to be because there is a greater expanse of atmosphere between the viewer and the moon in the former case, and atmospheric particles tend to diffuse the rays reflected from the surface of the moon. But Kepler's work shows that the size of the retinal image remains the same as the apparent size of the moon varies. What is needed, then, is a psychological explanation. Berkeley's account appeals to the physical difference between the expanses of atmosphere to argue that the retinal image is fainter (not larger) when the moon is seen on the horizon.[30] Berkeley infers that there is a corresponding faintness of the visual image. One of his principles is that increased faintness is generally correlated with greater apparent size *ceteris paribus*; this explains the deceptive appearance of moon (see NTV 68–70). Factors the principle assumes to be the same include the size of the visual image, and Kepler's result shows that to be constant. Also relevant are the number and kind of objects seen at the same time; Berkeley discounts this factor on the evidence that the illusion is not affected if the moon is seen in isolation across a body of water or an empty plain. So faintness of the visual sensation is the primary operative cue.[31] My point is just that Berkeley does not fault the perceptual process that produces the illusion. On the contrary, the illusory appearance is nothing more nor less than what the visual cues invariably signify and suggest in competent visual perceivers. We can conclude that vision meets condition (iv).

Before leaving this, we might note that Berkeley's effort to explain the persistence of certain visual illusions—the horizontal moon, the Barrow case—has an interesting implication regarding the mechanism of mediate perception. It seems our visual systems are selective in the habits of suggestion they acquire from experience. Despite the fact that we repeatedly find that objects seen in a mirror are not located behind it, our visual systems do not acquire the habit which would make them appear on the same side as the viewer; similarly, with the oar partly immersed in water.[32] And we continue to marvel at *trompe-l'oeil*. Since Berkeley presumably rejects theories on which we are innately disposed

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30   See Egan, "The Moon Illusion."

31   NTV 72 mentions two supplementary principles.

32   Cf. TD, 227–8.

to associate certain stimuli, but not others, this puts an explanatory burden on differences in the contexts in which two items are observed together; that is, observed co-existence typically disposes a person to connect them by suggestion just in case certain further conditions prevail. These might be either psychological factors, e.g. past experience, or environmental ones. But Berkeley himself seems to have taken no interest in exploring such questions about our susceptibility to suggestion.

According to characteristic (v), signs *in a language* comprise a system in which a certain stock of signs is capable of generating endlessly many further signs which stand for as many different things. This condition is partly satisfied because several rules of visual signification are continuous functions—the fainter the properly visual image, the greater the size it signifies; the more confused the image, the closer the object (in the presence of feelings of strain in the eyes), etc. Once a perceiver has caught on to the function, she can correctly understand endlessly many different visual cues when she perceives them for the first time. But (v) also states that two or more signs in a language can be combined to form signs of things not signified by the constituents alone. Berkeley's theory of vision satisfies this condition, as these passages show:

> The magnitude of the picture [*sc.* the proper object of sight] will perhaps be thought by some . . . to be . . . the sole means of suggesting [tangible size]. But so far is this from being true, that of two visible pictures, equally large, the one, being fainter and the upper, shall suggest an hundred times greater tangible magnitude than the other; . . .' (TVV 58)

> . . . besides this magnitude, situation, and faintness of the pictures, our praenotions concerning the kind, size, shape, and nature of things do concur in suggesting to us their tangible magnitudes. Thus, for instance, a picture equally great, equally faint, and in the very same situation, shall in the shape of a man suggest a lesser tangible magnitude than it would in the shape of a tower. (TVV 59)

In stating condition (v), I mentioned composition as a particular way of producing signs from ones already given. Signs formed in this way signify in virtue of the significations of their parts, taken separately, and the relation which unifies them. The attention paid to the compositional production nowadays shows it to be an important feature of languages, but Berkeley takes no special note of it. Still the passages just quoted mention the compositional structure of visual signs. A visual array comprising two or more images, each of which stands for a different object, signifies in virtue of the order internal to the images: the image which is uppermost signifies an object which is more

distant than the objects signified by lower images. Think of the view when you look down the street; typically, the higher the appearance of a thing in your visual field, the farther away it appears to be. Aside from this, the fact that several visual signs are properties of one and the same image affects what the image signifies; an image which is at once confused, faint, and relatively small suggests an object at great distance although none of these features do so in isolation. In a variety of ways, then, the visual signs of Berkeley's theory satisfy condition (v).

It remains to consider characteristic (vi), which has to do with apprehending the intention with which language is used. Berkeley is well known for stressing the variety of things we do with language:

> Besides, the communication of ideas marked by words is not the chief and only end of language, as is commonly supposed. There are other ends, as the raising of some passion, the exciting to, or deterring from an action, or the putting the mind in some particular disposition; to which the former is in many cases barely subservient, and sometimes entirely omitted ... (PHK Intro 20)[33]

There are two aspects of the aim for which linguistic expressions are produced: the intention of the one who produces them and the response from those who see or hear the expressions. Present day speech act theory distinguishes two sorts of things a person may do when uttering words which have a definite sense and reference. An illocutionary act consists in uttering the words with a certain intention—informing, asking, requesting; a perlocutionary act consists in success in conveying this intention to the audience—informing someone, eliciting an answer, and the like. If this sort of uptake on the part of the audience were inseparable from intention on the part of the speaker, Berkeley could make the case he needs. He could plausibly argue that a perceiver does not properly understand visual signs unless she has some inclination to be instructed by them. After all, it is doubtful that someone who absorbs no information from her visual system, who shows no inclination to act in accord with what lies in her line of sight, really sees anything at all. Viewers respond to visual signs as if signs are intended to inform them, entertain them, and direct their actions. Of course, the problem for Berkeley is to show that the signs are produced with this intention, or at least that viewers must think they are as a condition of understanding them. Yet it is plain that we can be instructed or guided by things which were not intended to have this effect on us. Moreover,

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33   Also Alc 7.14; *Works* 3.307.

communicative intention apparently plays no part in the detailed explanations of visual phenomena derived from the language of vision doctrine in TVV. The explanatory theory does not incorporate characteristic (vi). Berkeley seems to think that this particular characteristic of language can be inferred from principles of the theory, but it is difficult to see just how the reasoning might go.

In conclusion, I want to return to the grounding relation. If the foregoing line of thought is correct, the grounding relation for visual suggestion and signification is not the regular order among sensible things which prevails in the world. It is an invariant relation ordained by nature, but it is not to be identified with what Berkeley calls the 'laws of nature'. These are described in passages such as this one from *Principles of Human Knowledge*:

> Now the set rules or established methods, wherein the mind we depend on excites in us the ideas of sense, are called the *Laws of Nature*: and these we learn by experience, which teaches us that such and such ideas are attended with such and such other ideas, in the ordinary course of things . . . . this gives us a sort of foresight, which enables us to regulate our actions for the benefit of life. (PHK 30)

The laws of nature differ in several important ways from the rules nature ordains for visual signification-suggestion. In the first place, laws of nature have to do exclusively with the sensory ideas we do, or would, passively receive, that is, ideas which constitute the real world of sensible things, as Berkeley has it. Such laws are expressed in terms of the existence of sensible things: if a certain sort of sensible thing exists, then certain other sorts of sensible things exist. By contrast, the rules of visual suggestion-signification have to do with specifically visual ideas, on one hand, and ideas of imagination, on the other. There is an important difference between ideas of imagination and ideas passively received in perception in Berkeley's metaphysics. The sensible world is constituted of ideas which the infinite spirit does, or would, cause in finite spirits; by contrast, ideas of imagination are not part of this world and finite spirits produce them in themselves. Rules of visual signification govern the connection between the visual ideas a created spirit receives and the ideas they prompt the spirit to form provided it understands the language.[34] The rules of suggestion-signification determine the semantic

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34   Glauser, "La Structure de la perception," stresses the point that visual signs do not suggest (bring to mind) the perception of an actual object, but rather an idea of imagination which represents the object one would perceive if such-and-such were to happen.

content of visual cues but do not guarantee their truth. Rules of this sort have two primary dimensions: semantic and psychological. They determine what visual signs mean and they govern a certain function of the imagination.

On the other hand, there are notable respects in which the laws of nature and the rules of visual suggestion-signification are alike. Both are instituted by the author of nature. They are equally universal and, I would urge, both have the status of laws.[35] Moreover, they both guide us in acting; both enable us to learn from experience what to do in order to satisfy our needs, and so on. The information we take from the laws of nature is in the fore in several passages such as this, which comes from *Principles*:

> . . . the Laws of Nature . . . [teach] us that such and such ideas are attended with such and such other ideas, in the ordinary course of things. This gives us a sort of foresight, which enables us to regulate our actions for the benefit of life. And without this we should be eternally at a loss: we could not know how to act anything that might procure us the least plea-sure, or remove the least pain of sense. That food nourishes, sleep refreshes, and fire warms us . . . that to obtain such or such ends, such or such means are conducive, all this we know, not by discovering any nec-essary connexion between our ideas, but only by the observation of the settled Laws of nature, . . . (PHK 30–31; also 51)

The striking similarity between passages such as this and texts describing the ground of visual perception might seem to imply that the laws of nature and the laws of visual suggestion are coextensive, after all. This cannot be correct in view of the importance of visual deception for the elaboration and confirma-tion of Berkeley's explanatory program.

We do better to take the similarity as evidence of a certain sophistication in Berkeley's views about the basis on which we project future perceptions from past experience. In fact, a passage in the treatise on human knowledge argues that the regular connections among events which are commonly thought to be causal are, in fact, relations of sign to things signified.

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35   Thanks to Joan Weiner for pressing me to be clear about this. Although there are laws of visual signification, they are not necessary in the way that is inconsistent with linguistic signification, because there is no necessary connection between the existence of a token of a visual sign and the existence of what it stands for.

> The fire which I see is not the cause of the pain I suffer upon my approaching it, but the mark that forewarns me of it. In like manner, the noise that I hear is not the effect of this or that motion or collision of the ambient bodies, but the sign thereof. [Moreover] the reason why ideas are formed into machines that is, artificial and regular combinations, is the same with that for combining letters into words. That a few original ideas may be made to signify a great number of effects and actions, it is necessary they be variously combined together; and to the end their use may be permanent and universal, these combinations must be made by rule, and with wise contrivance. By this means, abundance of information is conveyed unto us, concerning what we are to expect from such and such actions... (PHK 65)

These signs should not be confused with signs in the language of vision. To compare regular combinations of sensations with words formed from letters of the alphabet is to say nothing about how combinations of sensations function as sources of information. Signs in the visual language suggest what they stand for; sighted people think of them in virtue of an instantaneous, habitual, unreasoned mental operation. Extracting information from the signs mentioned in this passage may require inference, review of evidence, and reasoning; indeed, in view of the reference to intricate machines, it may require knowledge of natural science.

Visual suggestion-signification is a fallible guide to future perception although it is sufficiently reliable for Berkeley to say it informs and directs us. At the same time, the circumstances in which perceptual suggestions are false can be discovered in principle. This is how we detect visual illusions. We are rarely fooled by them, as Berkeley knows; past experience would seem to be the basis on which we generally avoid assent to false visual suggestions, as he has it. In fact, the later treatise on vision introduces a distinction between cognitive faculties suitable to implement this division of labor: 'To perceive is one thing; to judge is another. So likewise, to be suggested is one thing, and to be inferred is another. Things are suggested and perceived by sense. We make judgements and inferences by the understanding.' (TVV 42)[36] This is not the

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36   The distinction between perception and judgment is not in NTV. The earlier work often speaks of judging, inferring, estimating, and concluding the distances and figures of objects by sight (e.g. NTV 3, 21, 45, 57, 62, 73, 78, 98). I suspect that writing *Principles* and *Three Dialogues*, which stress how and what we know about sensible things, alerted Berkeley to the need to divorce mediate visual perception from mental operations by which assent to perception can be overridden; see especially TD, 227–8.

place for detailed examination of Berkeley's theory of empirical induction. But it is natural to assume that perceptual suggestion often carries assent along with it, although it is defeasible in the light of judgments based on past experience. The similarity of passages on the order of nature and the ground of visual signification does not indicate that they are coextensive; nor does Berkeley's recognition of more than one system of signs show that he fails to keep them distinct. Instead, both of these facts about the texts point to the conclusion that Berkeley's account of the psychological operations by which we project what we will perceive from our past experience, and the warrant we have for doing so, is crafted with considerable subtlety.[37]

Berkeley on Situation and Inversion

Lorne Falkenstein

Over *Principles* 42–43 Berkeley worried that we might "in truth" (not just in dreams) see things existing at a distance of some miles away from us, and that such things could not plausibly be supposed to exist only insofar as they are perceived. He went on to say that he had developed his new theory of vision in order to address this worry.

> 42. Thirdly, it will be objected that we see things actually without or at a distance from us, and which consequently do not exist in the mind, it being absurd that those things which are seen at the distance of several miles, should be as near to us as our own thoughts. . . .
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> 43. . . . that we should in truth see external space, and bodies actually existing in it, some nearer, others farther off, seems to carry with it some opposition to what hath been said, of their existing nowhere without the mind. The consideration of this difficulty it was, that gave birth to my *Essay towards a new Theory of Vision*, which was published not long since. Wherein it is shewn that *distance* or outness is neither immediately of itself perceived by sight, nor yet apprehended or judged of by lines and angles, or anything that hath a necessary connexion with it . . .[1]

Thomas M. Lennon and Margaret Atherton have recently drawn attention to two reasons for thinking that Berkeley's worry might be misplaced.[2] According to Lennon, the worry confuses "ontological distance" with "spatial distance." The former "has to do with an object's relation of dependence to the mind," the latter "with relations, such as to the left of." (115) According to Atherton, the worry is misplaced because Berkeley insisted at the outset of the *New theory of vision* that it is "agreed by all" that distance is not immediately perceived. As she puts it, "Berkeley apparently rules out of court, on the grounds that no one holds it, the very belief he is later held to be saying was the one he wrote the *New Theory* to refute." (12)

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1 Citations from Berkeley are drawn from the text as printed in Berkeley, George. *Philosophical works*. Edited by Michael R. Ayers. London: J.M. Dent, 1975.

2 Lennon, Thomas M. "The historical consistency of Berkeley's idealism." *British journal for the history of philosophy* 16 (2008), pp. 101–124. Atherton, Margaret. *Berkeley's revolution in vision*. Ithaca: Cornell University Press, 1990.

In this paper, I argue that the worry is nonetheless serious and Berkeley had good reason to think that it would take nothing less than a theory of vision to properly address it. What is more, I argue, his theory of vision fails to adequately address it, which means that it is a very serious worry indeed. The specific locus of the failure is Berkeley's account of what he called "situation." This is where, if anywhere, Berkeley should have succeeded at removing the worry. He did not.

1   The Importance of the Worry

1.1   *Ontological and Spatial Distance*

To begin, consider the charge that Berkeley's worry was ill-founded because it confuses ontological with spatial distance. The problem with this is that, unless some special reason can be given to the contrary, "spatial distance" suffices for "ontological distance."[3] This is in turn because things that are spatially distant occupy distinct places. Things that occupy distinct places are separable from one another. If things are separable, the destruction of the one does not imply the destruction of the other—at least not in the absence of a special argument establishing some sort of reciprocal dependence between the two. In the case where there is contact or immediate adjacency, there may be such reciprocal dependence, but the likelihood of such dependence becomes increasingly slight when things are separated by increasingly large gaps (hence Berkeley's reference at Principles 42 to separation by a "distance of several miles," which is not a merely rhetorical embellishment, but an important premise of the argument). Accordingly, if we accept that vision truly tells us of the existence of objects at locations removed by significant distances from us—at least some times—that is by itself a reason to suppose that those objects exist independently of being perceived by us (our very annihilation being irrelevant to their continued existence). It is incumbent on the person who wants to maintain that objects do not exist independently of being perceived to explain why, even though the objects are situated some miles away from me, my bare act of perceiving them is requisite to their existence. Berkeley realized this onus, and that is why, he said, he wrote the *New theory*.

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3   The converse does not hold, but the objection Berkeley was concerned with is that spatial distance (specifically a distance of several miles) entails ontological distance (i.e., existence independently of being perceived).

The problem posed by vision of distant objects cannot be adequately addressed by appealing to dreams.[4] In dreams things seem to be outside of us but really are not. But the worry is not based on how things seem, but on how they are. To address it, it is not enough to claim that things sometimes seem to be at a distance from us even though they are not. It is necessary to establish that they are never at any distance from us, so that our perceptions to the contrary are all always mistaken. Berkeley was aware of this. Though, in a passage marked by ellipses in my earlier citation, he initially answered his worry by asking his reader to consider "that in a dream we do oft perceive things as exiting at a great distance off, and yet for all that that, those things are acknowledged to have their existence only in the mind" (Principles 42), he went on to admit that the perception of things as existing a great distance off that are not acknowledged to have their existence only in the mind still poses a problem.

> 43. But for the fuller clearing of this point, it may be worth while to consider, how it is that we perceive distance and things placed at a distance by sight. For that we should *in truth* see external space, and bodies actually existing in it, some nearer, others farther off, seems to carry with it some opposition to what hath been said" [my emphasis].

The *possibility* that I might sometimes correctly perceive things to exist at some distance from me suffices to ground the worry. Removing that possibility requires nothing less than an inquiry into *all* claims to perceive things existing at some distance from us. And that is tantamount to offering a theory of perception.

A different attempt to address the problem posed by vision of distant objects proceeds by claiming that the mind does not occupy a place in space and so cannot properly be said to be at any spatial distance from objects.[5] If minds are of such a different order of being, that is all the more reason for supposing that

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4 Compare Atherton, *Berkeley's revolution in vision*, p. 11. A further reason for rejecting the appeal to dreams is brought up in the section, "A problem with Berkeley's answer" below, pp. 306–307.

5 Compare Pitcher, George. *Berkeley*. London: Routledge, 1977, pp. 29–33. Pitcher makes trouble for Berkeley by saddling him with the view that if objects are *not* located outside of us, then they must be located in us. Whatever reasons there might be for attributing this view to Berkeley, the worry I have been discussing does not involve it. The worry rests on the claim that if objects *are* located outside of us, then they exist independently of us, and so independently of being perceived by us.

there could be no dependence between them and bodies. The onus remains on those who would advance this theory to defend it, and to explain how spatially located things could be dependent on aspatial minds. One would think that nothing less than a theory of perception would be required to do that job.

1.2 *Immediate Perception*

I turn now to the charge that Berkeley should have considered the worry to be ill-founded because he maintained that it is agreed by all that distance is not immediately perceived. The problem with this is that even if we do not immediately perceive objects set at some distance from us, as long as we immediately perceive anything else that is necessarily connected with objects existing at a distance from us (for example, light rays reflected from distant surfaces or angles formed by optic axes inclined to converge at a distant point), there is a problem. The necessary connection between what is immediately perceived and the distant object would justify an inference from what is immediately perceived to the existence of the distant object. As long as that inference can be justified, the worry is well-founded.[6]

When expanding on his worry at *Principles* 43, Berkeley showed himself to be cognizant of this consideration.

> The consideration of this difficulty it was, that gave birth to my *Essay towards a new Theory of Vision*, which was published not long since. Wherein it is shewn that distance or outness is *neither* immediately of itself perceived by sight, *nor yet apprehended or judged of by* lines or angles, or *anything that hath a necessary connexion with it* [*Principles* 43, my emphasis].

While Berkeley's *New theory of vision* devotes only a single sentence to refuting the possibility that distance is immediately perceived by sight, it devotes a great deal of energy to arguing that those things that are necessarily connected with distance are not immediately perceived (NTV 4–15), and that those things that are immediately perceived are not necessarily connected with distance or with things existing at a distance (NTV 16–28).

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6 Compare Lennon, "The historical consistency of Berkeley's idealism," p. 111. The issue, for Berkeley, is not whether we judge or infer distance, but whether the judgment or inference is based on something that is necessarily connected with distance.

2   Berkeley's Answer to the Worry

So far, I have argued that Berkeley had good reasons to be worried about the objection that "we see things actually without or at a distance from us." I have also noted that he took his *New theory of vision* to constitute an answer to this objection. In this section I briefly review how the *New theory* answers the objection.

There are three senses that appear to inform us of the existence of distant objects, vision, hearing and smell. However, of these three senses, only vision supplies us with an accurate idea of the relative positions of the parts of objects and hence of the properties of size and shape. Hearing and smell only tell us about the general distances and directions of objects and what they tell us is so imprecise that we are conscious of attempting to infer distance and direction from purely qualitative features of the sound or smell sensations—features that are not necessarily connected with location and that we only conjecturally take to be vague signs of different distances and directions in space as ascertained by touch (NTV 46–48).

Berkeley claimed that even though what we learn from vision about the distances of objects and their parts is far more detailed and accurate, it is still learned in the same way, by drawing inferences from features of visual sensations that are only contingently connected with distance. Visual sensations are, provisionally,[7] extended colour patches that are at no distance from us. These colour patches can be brighter or fainter, and more clearly or more confusedly outlined. They are also accompanied by sensations in the muscles responsible for turning and focusing the eyes. None of these things has any necessary connection with distance. But we discover a constant correlation between faintness and distance, confusion and proximity, and strain and proximity, and so learn to read these features as signs of distance and proximity (NTV 17, 20, 23–26). The difference between the case of vision and those of sound and smell

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7   The reason for this qualification will become evident in the sequel. For now, note that for Berkeley confusion is an important cue to distance, and hence something that must be perceived before distance can be perceived. The only way that a visual sensation can be "confused," is if it has edges that overlap with the edges of surrounding sensations, which implies extension, figure, and location in space. (Berkeley's stated definition of "confusion" by appeal to cones of light rays being focused on overlapping parts of the retina [NTV 35] is liable to the same objection he leveled against the "geometric theory." Since we do not see the light rays, "confusion," thus understood, is invisible and so could not serve as a distance cue. The alternative definition I have given is at least suggested by his definition.) Insofar as Berkeley's theory specifies that we need to first see confusion before we can see distance, it entails that we need to first see extended colour patches.

is that the constancy and precision of visual associations makes them easy and automatic. As a consequence we fail to notice them and end up confusing the sign with what it signifies and supposing ourselves to immediately see distance and proximity (NTV 51).

Importantly, the distance and proximity we think we see are not the immediate objects of any sense, even of touch. Though touch informs us of the relative locations of objects and their parts over three dimensions, the only objects we learn about by touch are those in contact with our bodies, not those separated by some distance from us. We do, however, discover that operations like walking and reaching can bring us to touch certain objects. These operations take time. The ideas of visual distance and proximity are actually the ideas of a greater or lesser time required to perform the operations resulting in tactile contact with an object (NTV 45). Accordingly, when I see what I call objects placed at various distances from myself and from one another, I am not really seeing spatial separation between myself and those things. I am seeing something else that I have learned to interpret as a sign for how long it will take to touch an object.

Even more importantly, the object that it takes some time to touch is not the object I now see. The colour patch that I see and that I interpret, on account of its degrees of faintness and confusion and on account of other factors, as a sign of a certain time required to reach an object is not the colour patch I would see after performing that operation (NTV 44). Neither is the colour patch I see after performing that operation the object I touch after performing the operation. The object I touch is characterized by a set of tactile, not visual sensations. I do not, therefore, seeing anything that tells me, mediately or immediately, that the colour patch I now see is at any distance from me. The colour patch I now see is a sign for an entirely distinct tangible object, and the degrees of faintness and confusion of the colour patch are signs for the "distance" (i.e., for how long it will take to reach) that distinct tangible object.

There is therefore nothing that is ever perceived by any sense as being spatially separated from us, either immediately or mediately. Even mediate perception is only anticipation of what will be immediately perceived after an interval of time, not perception of what is at a distance in space.

3   A Problem with Berkeley's Answer

So far I have argued that Berkeley had good reason to be worried that the perception of objects existing at some distance from us implies that those objects could exist independently of being perceived, and I have outlined

how Berkeley's *New theory of vision* addresses that worry by proving that nothing that we perceive, by any sense, is at any distance from us. Even the three-dimensional, solid objects perceived by touch are perceived only to the extent that they touch us. They become imperceptible when removed from us. In this section, I raise a problem with Berkeley's answer.

In giving his account of distance perception in the *New theory*, Berkeley allowed that even though they are at no distance away from us, the objects of vision are minimally visible colour points that are disposed over at least two dimensions to constitute extended, shaped colour patches, appearing with varying degrees of confusion or distinctness. The textual evidence for attributing extension and shape to the immediate objects of vision is considerable. According to NTV 43, extension exists in the same place as colour and the two cannot be separated or abstracted from one another. According to NTV 44 the visible moon is "a round, luminous plane of about thirty visible points in diameter." According to NTV 45 when I first look at an object I perceive "a certain visible figure and colour." According to NTV 47–48, recognizing that "the extension and figure of a body" is "let into the mind" by vision as well as touch is important for understanding why the ideas of sight are so much more readily confused with those of touch than are those of sound. According to NTV 49, there is such a thing as visible figure and extension—it is just not the same as tangible figure and extension. NTV 50 says that the immediate objects of vision can "grow greater or smaller" and can be "more confused, or more clear" both of which are only possible if these objects have some size and shape. NTV 54 declares that the immediate objects of sight have a distinct magnitude or extension which can be greater or lesser. NTV 56 says that the magnitude or extension of visible objects is immediately perceived by sight. And NTV 77 declares that what we properly see, lights and colours, is seen in "sundry situations."

What Berkeley said about the immediate objects of vision in these passages is no different from what he allowed to be the case throughout the *New theory of vision* about the immediate objects of touch. Though we can only touch what is in contact with us, we feel those objects to consist of multiple parts, disposed over three dimensions.

This has an untoward implication for Berkeley's immaterialist project. If the immediate objects of vision and touch are nothing but my own ideas of sensation, as the immaterialist thesis maintains, but these ideas of sensation are disposed over two or three dimensions to constitute extended figures, then it would seem to follow that I must be extended. Granting what whatever is extended is a body, it would follow that at least one body must exist, namely, me. But if my body exists, others might as well exist. And if one extended body

exists, extension may continue beyond the bounds of this one body and other bodies may be placed outside it in this ambient space. The problem of the independent existence of distant objects resurfaces. This time it is posed, not by the fact that we seem to see objects placed at a distance from ourselves, but by the fact that our own ideas of sensation are placed at distances from one another, including distances up and down and to the left or right.

Berkeley struggled with this untoward implication over *Principles* 49, but without much success.

> . . . it may perhaps be objected, that if extension and figure exist only in the mind, it follows that the mind is extended and figured; since extension is a mode or attribute, which (to speak with the Schools) is predicated of the subject in which it exists. I answer, those qualities are in the mind only as they are perceived by it, that is, not by way of *mode* or *attribute*, but only by way of *idea*; and it no more follows, that the soul or mind is extended because extension exists in it alone, than it does that it is red or blue, because those colours are on all hands acknowledged to exist in it, and nowhere else.

The problem with this answer is that Berkeley is not entitled to the distinction between existence by way of mode or attribute and existence by way of idea that he appealed to here. As Lennon has noted, "for [Berkeley] the immediate object of perception is a sensation, the model for which is pain, whose only existence can be in the mind. Moreover, the sensation does not intend, represent or refer to anything beyond itself, either material or ideal. (A pain is not *about* anything.)" (109) For Berkeley, to have a sensation of pain is not for the mind to have an idea *of* some object—a pain. It is for the mind to *be* modified in a certain way—to exist in the state of being pained. The pain modifies the way the mind is. But at least some pains are tactile sensations that occur at different locations relative to one another. A pain in the lower back occurs between a headache and a cramp in the foot. To the extent that all of these pains are both modifications the mind, and things that occur at different locations relative to one another, the mind that is modified by them must be spread out over all the places where they occur.[8] To the extent that Berkeley took the sensation of pain to be paradigmatic for all sensation, including the sensation of colour, he would have to be committed to saying the same about sensations of red and blue, whatever absurdities he might have found in that view. The mind that has sensations of red and blue would have to be reddened

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8   This point was made by Hume, *Treatise* 1.4.5.

and "blued" insofar as it has those sensations, just as it is pained insofar as it has a sensation of pain. And because the sensations of red and blue must, as a condition of distinctness, be set outside of one another at different locations, the mind that has both of those sensations at once would have to be spread out over those locations.

4   Berkeley on "Situation" and "Number"

An obvious way around this problem is to maintain that colours and pains are not in fact disposed in space, but only seem to be so as a consequence of some intermediate process of association.[9] And, in later parts of the *New theory*, Berkeley made just this claim, at least as concerns colours (NTV 103, 129–130, 156, 158).[10] In these passages, Berkeley's earlier assertions to the effect that the immediate objects of vision have extension and shape are replaced by the more radical claim that we see only light and colours. But Berkeley also had a reason to hold back from making this reply: it would undermine his claim that sensible qualities and extension cannot be abstracted from one another—a claim that plays an important role in his case for immaterialism. In 1994, I argued that Berkeley never adequately resolved this tension.[11] While he claimed that the only immediate objects of vision are light and colours, he never did the heavy lifting required to provide an account of how we only mediately come to perceive these objects to be located on a visual field. Nor did he attempt to reconcile the claim that we perceive only light and colours with his case against abstracting extension from colour. Instead, when it suited him to claim that colours are located, he did so, and when it suited him to deny

9   Compare Thomas Reid, *An inquiry into the human mind on the principles of common sense*. Edited by Derek R. Brookes. University Park, Pa.: The Pennsylvania State University Press, 1997, ch. 6 sec. 11 p. 119, who maintained that denying that visible objects have figure, position or extension was Berkeley's only recourse when accounting for erect vision, because the alternative would compel him to accept that "there is a top and a bottom, a right and a left in the mind." Reid turned this point against Berkeley, maintaining that if we do grant that we see objects erect and not inverted (which, presumably we all do) we thereby suppose that those objects must have an existence outside of and independent of the mind. Thanks to James Van Cleve for reminding me of this.

10   If a case can be made for colour, then an analogous case might be made for pain and other tactile sensations, especially given the greater labour we expend determining shape by touch. Colour can therefore be treated as the hard case.

11   Falkenstein, Lorne. "Intuition and Construction in Berkeley's Account of Visual Space." *Journal of the History of Philosophy*. 32.1 (1994): 63–84.

that they are located, he did so. His preferred way of dealing with the tension seems to have been to obfuscate the issue by using ambiguous expressions that could be interpreted either way (e.g., claiming that "distance" is not immediately perceived without specifying whether the distance referred to is visual depth or also separation along the remaining two dimensions).

Margaret Atherton has since provided an ingenious defence of Berkeley's position, claiming that his considered position was that "visibles are not spatially ordered."[12] Drawing on the *Theory vindicated*, Atherton mounts a compelling case for the point that Berkeley intended the parts of the *New theory* dealing with distance, magnitude, and situation to be understood progressively rather than as three independent applications of an associationist thesis to different problems of spatial perception. Confronting the naive supposition that we see what we touch, Berkeley first showed that we do not immediately perceive distance, then that we do not immediately perceive magnitude, and finally that we do not even immediately perceive situation. In the process he "deconstructed" visual experience, progressively ridding it of meaning until he had reduced immediate visual experience to a collection of otherwise meaningless sensations of light and colour. The *Theory vindicated* reverses this argument, explaining how we learn to interpret light and colours, first, as having position on a visual field, then as having magnitude, and finally as being more or less distant from us. In both works, the account of situation has a crucial role to play. It is the part of the *New theory* where Berkeley rids visual experience of the last vestiges of spatial order, and the part of the *Theory vindicated* where he invests visual experience with the first instances of such order.

Atherton's defence nicely explains why Berkeley would sometimes speak as if we only see light and colours and at other times speak as if we immediately see colour patches disposed on a visual field. The claim that we only see light and colours is a conclusion of the *New theory*, only proven towards the end of that work. Over the earlier portions of the work, the account of what is immediately perceived is progressively restricted. And, as a matter of

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12   Atherton, Margaret. "What have we learned when we learn to see? Lessons learned from the *Theory of vision vindicated*." Edited by Paul Hoffman, David Owen, and Gideon Yaffe. *Contemporary Perspectives on Early Modern Philosophy*. Peterborough, ON: Broadview, 2008, pp. 273–288. The citation comes from p. 281. In fairness, Atherton's purpose is not to address the worry that has been raised in this paper. Her concern is rather with Berkeley's view that visual sensations have come to serve as quasi-linguistic signs for radically different tangible objects. An incidental (and from her perspective minor) aspect of this project is her commitment to the position that for Berkeley the visual signs have no spatial features, even two-dimensional ones. The focus I give to that thesis here does not do justice to the full story she has to tell.

fact, claims that we immediately see colour patches are found only in the earlier parts of the work, whereas claims that we immediately see only light and colours are found in the later parts.

Atherton has also struggled with the tension between Berkeley's claim that we only see light and colours and his position on abstraction.

> The light and colours Berkeley frequently says constitute the proper and immediate objects of vision I have termed "flashes" and as such, they can be said to have, as Berkeley does say, an extension that is unabstractable from color. But in the size section, and again, later at the end of the *New Theory*, Berkeley [uses] the term "visual extension" to refer to a sized, shaped extent, and this second use, I am proposing denotes a mediate and not an immediate object, in fact just like distance. ("Lessons," 285)

If Atherton means to say that colour flashes have extension but not size or shape, then her position still does not square with Berkeley's, since he considered the view that extension can be conceived apart from any specific shape and size to be even more outrageous than the view that it could be conceived apart from any sensible quality (Introduction 8; 3D1: 192–94). If, on the other hand, she means that the colour flashes do have size and shape, but just not the same size and shape as the tangible objects we learn to associate them with, then her defence of Berkeley's claim that we immediately perceive only light and colours collapses.

One way to sustain Atherton's defence is to bite the bullet on abstraction. For his purposes in arguing for immaterialism, Berkeley only needed to insist that we cannot separate ideas of extension, magnitude, and figure from ideas of sensible qualities. He did not need to maintain that the inseparability is reciprocal. This would make sense if colours are minimally visible points that have no magnitude and consequently no shape, if magnitude and shape arise only from the assignment of many colour points to different locations, and if the location of these points is only mediately perceived. In that case, extension, magnitude, and figure could only be perceived by mediately perceiving the location of multiple sensible points. There could be no perception of extension and its modes without perceiving sensible points, but perhaps individual sensible points could be immediately perceived without perceiving location, or, consequently, extension, figure, or magnitude.

Setting the issue of abstraction aside, the main challenge for an interpretation like Atherton's is to explain, negatively, how Berkeley succeeds at ridding immediate visual experience of all vestiges of spatial order and, positively, how

we come to mediately perceive visual position. Doing the latter requires the identification of cues, themselves not necessarily connected with position, on the basis of which we learn to perceive position, much as Berkeley had identified faintness, confusion and muscle sensations as cues for the perception of visual distance. Atherton maintains that Berkeley met both challenges, the first in those sections of the *New theory* dealing with the visual perception of "number" (esp. NTV 109–110) the second in those sections of the *New theory* and the *Theory vindicated* dealing with the visual perception of what Berkeley called "situation" (esp. NTV 97–98 and TVV 47).

Consider the latter issue.

4.1 *Situation and Inversion*

According to Atherton, Berkeley took eye motions (or, better, sensations of strain in the eye muscles accompanying motion) to be the cues on the basis of which we assign an order to the colours that we see. Some of these eye motions are felt to be directly contrary to or in accord with the direction of gravity, leading us to conceive of those things seen by turning the eyes up or down as being high or low.

> What happens according to [Berkeley's] account is that we stabilize the color we see by coming to correlate our tangible experiences of reaching up with the color that comes into view when we raise our eyes up. The upshot of this process is that we come to construct a kind of Alberti-window, that is, we learn to speak of our colour experiences as if they were laid out spatially on a grid. (Atherton, 284)

There are reasons to think that this achievement is not ultimately feasible. It is also unclear whether Berkeley thought that this is how we come to perceive the position of colour points.

1. *Intrinsic plausibility*. Eye motions are indeed the ground of the perception of "situation" according to Berkeley (NTV 97–98, TVV47). But if "situation" is taken to mean "location on a visual field" then Berkeley's account is hopeless. There are a vast number of locations on the visual field. According to Berkeley's estimate (NTV 44), the visible moon is occupied by over 900 minimally visible points, and it takes up just a small portion of our visual field. Using eye motions to determine which of millions of immediately perceived, disordered colour points are to be assigned to which of millions of locations on the visual field would be a huge task. Yet on first opening our eyes, it takes us no time at all to populate the visual field with colour points. Even nystagmic and saccadic

motions (which Berkeley did not know about and which current theory in any case invokes for other purposes) are not fast enough or comprehensive enough to do that.[13]

The problem is made more acute by the fact that if colour points are immediately perceived to have no location, then they can only be individuated by their colour. Supposing that indiscernibles are identical, this entails that no two identically coloured points could be seen at the same time, there being, as yet, no positions to distinguish them. This raises questions about how we could see uniformly coloured surfaces or experience double vision—not to mention how the visual field could be populated when looking at something like the night sky, where the apparent colours are restricted to just a few shades of black and white.[14] Eye motions would have to lead us to assign the same coloured point to multiple places on the visual field. Since these motions take time to perform, this creates ambiguity. Should eye motions lead us to think of the same colour point as existing in many places at once, or of a single point as moving from one place to another over the time it takes to perform the eye motions that localize it in two different places?

Motion poses a further problem, as does the possibility of qualitative change. Since things can move, often very quickly, eye motions would need to be repeated in order to determine which colour points are at static locations and which are in motion. And since static points can change colour over time, even more ambiguity is introduced.

Given the size and complexity of the task of localizing colour points by moving the eyes to see which colours come into view, it hardly seems plausible that we should be able to see an ordered visual field as quickly and effortlessly as we do—barely upon opening our eyes or turning to look in a new direction.

2. *Textual evidence*. As a matter of fact, Berkeley did not appeal to eye motions to account for how colour points come to be localized on a visual field. "Situation" is an ambiguous term. Offering an account of how things come to be "situated" could mean offering an account of *where* things are situated, and

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13   See Palmer, Stephen E. *Vision science*. Cambridge, Mass.: MIT, 1999, pp. 520–524. Visual nystagmus is just a small tremor, which does not cause the focus of the eyes to scan the entire visual field, and saccades focus on objects of attention, failing to direct the focus of the eyes to large portions of the visual field.

14   Atherton's representation of Berkeley's position is compatible with the view that we only see one point at a time, and merely remember what other points would be seen were we to move the eyes a certain way. That is a lot to remember, given the number of points there are, and Berkeley thought that we do see more than one thing at a time (NTV 110).

this is how Atherton understands it. But it might instead mean offering an account of *how* things are situated—as when it is asked whether something is upside down or right side up. Berkeley's account of "situation" is actually of the latter sort. It is an account of erect vision rather than of visual position.

The discussion of "situation" in NTV opens by identifying a "mighty difficulty" with the view that we see by means of retinal images: The images are:

> ... painted in an inverted order on the bottom of the eye: the upper part of any object being painted on the lower part of the eye, and the lower part of the object on the upper part of the eye: and so also as to left and right. [88]

Note that this "mighty difficulty" is not a difficulty determining the *order* in which objects are painted alongside one another. It is rather a difficulty posed by the *inversion* of the *direction* in which the order runs on the retina. By way of illustration, given that + is disposed between — and >, does the order run from left to right

<p align="center">—,+,></p>

or right to left,

<p align="center"><,+,—</p>

from top to bottom

<p align="center">|
+
∨</p>

or bottom to top?

<p align="center">∧
+
|</p>

The order is the same regardless of which of these ways it runs (+ is always between the other two, never on an extreme end, and — and > are always turned the same way relative to the other members group). But the direction of the order of the images impressed on the retina is inverted and reversed with respect to the direction of the order of the corresponding tangible objects. The "mighty difficulty" is not a difficulty with how we come to perceive + to be placed between — and >, but with how we come to orient the string properly given that the orientation on the retina is inverted and reversed.

Over subsequent sections of the *New theory* Berkeley expressed his dissatisfaction with received ways of addressing this problem. He then turned to

propose his own way, beginning by examining how a blind person would determine the "situation" of objects. Tellingly, the account he proceeded to give says nothing about how a blind person would determine where tangible objects are situated relative to one other tangible objects. It rather talks about how a blind person would determine whether fairly complex objects, consisting of multiple parts, like human bodies with heads, legs and feet, are high or low, erect or inverted, relative to the pervasive sense of gravity. Those objects are high which are touched by reaching up, contrary to the direction of gravity, even apart from reference to any other objects. (Admittedly, Berkeley did go on to say that the erect or inverted orientation of objects can be defined relative to a particular tangible object, the tangible Earth. But this is not a primary basis for the determination of "situation" but only arises after the blind person has learned that the tangible Earth is always low in the more basic sense of being low relative to the direction of gravity.)

Berkeley then turned to consider what a blind person would experience when newly made to see. He did not claim that the previously blind person would not see colour points disposed around another, some more central, others more peripheral. He only claimed that because gravity can only be felt and not seen, the newly sighted person would not see which side of the visual field of colour points is the high or low one. Eye motions contrary to or in accord with gravity serve, not to locate colour points relative to one another, but to invest a certain side of an already perceived visual field with a tangibly upward or downward significance. This is a feasible task, unlike the task of assigning millions of locations to colour points in a fraction of a second, and in the absence of any criteria for identification and individuation of those colour points over time. Motion of the eyes contrary to the direction of gravity shifts an entire, already present visual field to one side, leading us to identify whatever comes to occupy the leading edge of the field with what is up and whatever comes to lie on the trailing edge of the field with what is down. A single motion serves to orient the entire field at once.

The *Theory vindicated* sharpens the same observations. At TVV 46 Berkeley declared that "terms denoting tangible extension, figure, location, motion, and the like, are also applied to denote the quantity, relation, and order of the proper visible objects or ideas of sight." The statement implies that visible objects do have quantity, relation, and order. They just do not have the same sort of quantity, relation, and order that tangible objects do. Berkeley did not go on to describe how they differ, but since he did say that visible objects have order, the difference cannot consist in the fact that visible objects lack any order whereas tangible objects do have an order. The more likely difference is that whereas the order of tangible objects has directionality (there is a

higher and lower in tangible space), visual space has no intrinsic directionality. This would make the application of directional terms to the order of visible objects merely metaphorical, but the same would not hold of isotropic terms. And in fact, the continuation of the passage mentions only the directional categories, "high," "low," "up," "down," and the ambiguous term, "situation," and makes no attempt to apply the point to isotropic categories such as "central," "peripheral," "between," "separate," or "alongside."

> But this [use of terms denoting tangible extension, figure, location, and motion to denote the quantity, relation, and order of visible objects] proceeds only from experience and analogy. There is a *higher* and a *lower* in the notes of music. Men speak in a high or a low key. And this, it is plain, is no more than metaphor or analogy. So likewise, to express the order of visible ideas, the words *situation, high* and *low, up* and *down*, are made use of, and their sense, when so applied, is analogical. [TVV 46]

Unlike the *New theory*, which appeals to eye motions to explain how the visual field comes to acquire a directionality it originally lacks, the *Theory vindicated* appeals to eye motions to explain why we make the mistake of thinking that the application of directional terms to visual objects is not merely metaphorical, a mistake that culminates in our supposing that the objects we see are located in the same place as, and so are identical with, those that we touch (TVV 47). That is the end of the story. Having offered this account of "situation," the *Theory vindicated* goes on to raise the problem of the inverted image, solve it by maintaining that since we do not see the images on the retina there is no problem of how we rectify them, and close by observing that the principal point that consideration of the case of the inverted image leads us to appreciate is that we do not see the same objects that we touch (TVV 49–52). There is no attempt to appeal to eye motions to explain how a collection of originally unordered colour points comes to be assigned to locations on a two-dimensional visual field. The closest Berkeley came to making such an attempt is this passage, from TVV 47:

> . . . the various motions of the head, upward and downward, to the right and the left, being attended with a diversity in the visible ideas, it cometh to pass that those motions and situations of the head, which in truth are tangible, do convey their own attributes and appellations on visible ideas wherewith they are connected, and which by that means come to be termed high and low, right and left, and to be marked by other names betokening the modes of position . . .

Like the parallel passage at NTV 98,[15] this passage focuses on directional differentiation, not on isotropic ordering. The one suggestion that Berkeley might have intended something more is the reference to "other names betokening the modes of position" at the end of the passage. This reference should be compared with the parallel statement at NTV 98: "And without this motion of the eye, this turning it up and down in order to discern different objects, doubtless *erect, inverse*, and other the like terms relating to the position of tangible objects, would never have been transferred…" At used at NTV 98, "position" could just mean "orientation"—the "other…terms," like to "erect" and "inverse" could just be "frontwards," "backwards," "clockwise," "right side" up, etc. The use of "position" at TVV need mean nothing more. Even if it did, there is nothing in NTV or TVV to explain how eye motions could feasibly do any more than invest an already ordered collection of visible objects with directionality. Those wanting to interpret Berkeley as having intended to make this point are left having to saddle him with an implausible and inadequately supported conclusion on the basis of ambiguous pronouncements.

4.2   *Number*

It might be objected that even if the *New theory* and the *Theory vindicated* do not offer a plausible theory of visual localization, or even propose to offer such a theory, the *New theory* at least succeeds at the negative project of deconstructing the two-dimensional visual field and offering a reason to think that we do not immediately perceive location. Atherton has once again presented a compelling account of how Berkeley might be taken to have argued.

> Berkeley makes it plain that the visual field for the newly sighted man born blind would lack not only spatial organization, but would in fact lack any organization whatsoever. The newly sighted man not only would be unable to recognize whether a man he is now seeing has his head up or down, but would also be unable to recognize anything he is seeing as a head. Nor could he tell a head from a foot, or even know whether there was one head and two feet. Until he had learned to correlate the visual properties of the head and the feet with the tangible properties with which he was familiar, there would be no reason for him to bundle the

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15   TVV 47 contains a footnote reference to NTV 99, which is likely a misprint or a mistake. NTV 99 corresponds to TVV 48, both of which make a point about how, once we have learned to judge the direction in which visible objects lie, we use that information to make a further judgment about the location of tangible objects that we are not now touching, but that we associate with the visible objects.

various colors he sees into head and feet bundles at all. By the end of the discussion of situation perception in the *New Theory*, then, Berkeley has destroyed the supposition on which a theory like Malebranche's is based, that the visual system alone provides an organized picture or representation. Berkeley in fact has pulled apart the meaningful visual world of our ordinary experience into those elements that are due to vision alone— light and colors.[16]

Atherton is alluding to a discussion of the visual perception of "number" that Berkeley inserted at NTV 109–110, the end of his discussion of "situation." Berkeley opened these sections with the worry that a newly sighted person might be able to tell, even prior to eye motions, which side of a person is the footward side. The worry is grounded on the supposition that the newly sighted person can immediately see how many colour patches there are and so would be in a position to say that one side of the human body is the footward side because it is the only side constituted by two colours. Berkeley's response to the worry is to deny that "number" can be immediately perceived by vision.

Taken at face value, this is an absurd assertion. If I do not immediately see number, then I can't tell, upon first opening my eyes, whether I am seeing just a single colour (as when experiencing "white-out"), or points of different colours. This is tantamount to saying that I do not even immediately perceive light and colours. And however far Berkeley might have wanted to go in the direction of deconstructing immediate visible experience, he did not want to go that far. If I immediately see light and colours, I immediately see whether the colours are different from one another or all the same. And either way I see some number of colours—if I see no differences I see one colour; if I see differences, I see more than one. The only way not to see some number of colours, if only just one, is not to see at all.

In fact, Berkeley did not intend to make this absurd assertion. He was quite happy to grant that we see many colours at once. Speaking of what is immediately seen by the person born blind and newly made to see he wrote, "There crowd into his mind the ideas which compose the visible man, in company with all the other ideas of sight perceived at the same time," immediately adding that these ideas are "offered at once to his view" (NTV 110). From this it follows that we do immediately see some number of colour points—indeed a great number of them, not just those composing one head or two feet, but

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16   Atherton, Margaret. "Berkeley's theory of vision." In Kenneth P. Winkler, ed., *The Cambridge companion to Berkeley*. Cambridge: Cambridge University Press, 2005, p. 100.

those composing an entire person and all objects surrounding that person out to the limits of peripheral vision.

The problem with "number" as Berkeley went on to describe it, is not that we can't tell whether we are seeing one thing or more than one, but that we can't decide how to count up what we see. Should we count each colour point as one thing, even if it is immediately adjacent to other points of the same colour? Or should we take adjacent, identically coloured points together in the count and consider them as making up one, extended colour patch? Alternatively, should we count two or more different colours, or differently coloured patches as just one thing? The head of a human being is a combination of many different colour patches—red lips, white cheeks, black eyebrows, green eyes. A brown foot can be standing on identically coloured brown earth against the background of an identically coloured brown wall.

> . . . number (however some may reckon it amongst the primary qualities) is nothing fixed and settled . . . . We call a window one, a chimney one, and yet a house in which there are many windows and many chimneys hath an equal right to be called one, and many houses go to the making of a city. . . . Every combination of ideas is considered as one thing by the mind, and in token thereof is marked by one name. Now, this naming and collecting together of ideas is perfectly arbitrary, and done by the mind in such sort as experience shows it to be most convenient: without which our ideas had never been collected into such sundry distinct combinations as they now are. [NTV 109]

Berkeley did not stop here. He went on to specify what the experience is on the basis of which we decide to combine one collection of ideas together. It is the experience of conjoint motion.

> . . . but all these ideas offered at once to his view, he would not distribute into sundry distinct combinations till such time as by observing the motion of the parts of the man and other experiences he comes to know which are to be separated and which collected together. [NTV 110]

But motion is change of place relative to something else. We can only see colour points, or colour patches, or groups of identically or differently coloured patches move or move in concert, if colours are already perceived as disposed somehow in space, motion being a change in that manner of disposition. Far from deconstructing our experience of a two-dimensionally arrayed visual

field of colour points, Berkeley's account of how we tell what counts as one thing presupposes that experience.

Atherton's premises are all correct. The newly sighted person would not be able to recognize any particular collection of colour patches as going together to make one head or two feet and so would not be able to tell, upon first seeing, whether one collection of colour points corresponds to one head or to two feet. Nor would the person have any reason whatsoever to combine colour points into head or foot bundles. But the conclusions she would have Berkeley draw from these premises simply do not follow. Berkeley did not reduce vision to light and colours. He did not show that the visual field lacks spatial organization, much less any organization whatsoever. For Berkeley, "bundling" is not the operation of assigning colour points to locations in space. It is rather the operation of deciding which boundaries between groups of already arrayed colour points mark the outer edges of movable objects and which belong to the relatively immovable parts of the interiors of such objects, as in a game of connect-the-dots. The dots are already there, disposed in space. We just need to decide how to draw the lines between them.

5   Berkeley Apologetics

It might be objected that the interpretation I have placed on Berkeley's account of "situation" is too sophisticated for his time. It rests on a distinction between situation considered as location and situation considered as orientation that Berkeley would have been in no position to draw. Eighteenth century thinkers would have run the two notions together and would have considered that, in proving that orientation and direction are not immediately perceived, Berkeley had also proved that location is not immediately perceived.

One of the great conceptual advances of late 19th century mathematics was the new understanding it provided of the concept of space. Many 18th century thinkers, Berkeley not least among them, were inclined to think of space as something akin to nothing.

> And so let us suppose that all bodies were destroyed and brought to nothing. What is left they call absolute space, all relation arising from the situation and distances of bodies being removed together with the bodies. Again, that space is infinite, immoveable, indivisible, insensible, without relation and without distinction. That is, all its attributes are privative or negative. It seems therefore to be mere nothing. The only slight difficulty

arising is that it is extended, and extension is a positive quality. But what sort of extension, I ask, is that which cannot be divided or measured, no part of which can be perceived by sense or pictured by the imagination? [De motu 53]

19th and 20th century mathematicians showed, to the contrary, that space has a number of positive properties and that there are many kinds of space, which can be distinguished by their different metrical, dimensional, and other topological properties.

It is too much to expect that Berkeley would have been sensitive to these later developments. But, it might be objected, I have done just that. The distinction I have drawn between situation considered as location and situation considered as orientation, and the attendant distinctions between isotropic and anisotropic relations, and spaces in which directions are defined and those in which they are not, are distinctions that no 18th century philosopher can be justly expected to have been sensitive to. Berkeley cannot, therefore, be faulted for failing to appreciate them. For him, space is something unique and individual. It is not a genus, some species of which may exist in the absence of features that are essential to others. Lacking any means of distinguishing between isotropic and anisotropic spaces, he cannot be faulted for inferring that we cannot immediately perceive space from the claim that we cannot immediately perceive directions.

Berkeley did argue, in just so many words, that because direction and depth are not immediately perceived by vision, motion and space cannot be either. At NTV 137, he claimed that since motion is always motion up or down, to the right or left, nearer or farther, and none of these directions is immediately perceived by vision, someone newly made to see would not be able to tell whether what they see is in motion or not. And at NTV 126, he argued from the premise that depth (or "distance" as he ambiguously preferred to call it) is not immediately seen to the conclusion that "space, *vacuum*, or trine dimension" is not immediately seen. The reasoning behind this inference is amplified at NTV 155–7, where he claimed that planes are no more the immediate objects of sight than solids because to see a plane we need to be able to judge that its surface is "smooth and uniform." If these terms do not denote a uniquely tactile sensation, then "some idea of the distance" of the plane's parts from the observer is necessary to make this judgment. A further instance of a failure to draw distinctions that seem evident to our current understanding can be found at NTV 131, where Berkeley claimed that because a visual and a tangible line cannot be added to one another to make one sum, these objects must be "entirely distinct and heterogeneous." Interestingly, all of the passages

I have cited come from the final quarter of Berkeley's *New theory*, nominally devoted to the heterogeneity of the objects of sight and touch. In this section Berkeley drew on what he had established over the previous three parts on distance, magnitude, and "situation" to argue that there is absolutely nothing common to the immediate objects of sight and touch, and offered his strongest assertions of the thesis that we see only light and colours.

But it is going too far to excuse Berkeley for these gross inferences on account of his times. One does not need to be informed by later developments to appreciate the distinction between whether a teacup is placed on a saucer or alongside of it, and whether it is placed upside down or right side up on that saucer, or to appreciate that just because you can't tell which side is up, it doesn't follow that you can't see parts disposed alongside one another. The fallacy of Berkeley's argument at NTV 137 concerning the need to perceive direction in order to perceive motion would have been evident to anyone living at the time by appeal to the consideration that things don't stop moving when you get lost. Even though a trip down the unfamiliar winding streets of an old city might leave you unable to tell which direction is North, the horses, carriages, and people still walk by. Motion is change of place, which can be detected relative to landmarks (or what are arbitrarily taken to be landmarks) even when one does not know whether those landmarks are high or low, to the right or the left, fore or aft, in motion or at rest, as Berkeley himself admitted at *Principles* 115.

Similarly, one of Berkeley's contemporaries would have only needed to look at the night sky to appreciate that an inability to perceive how far the stars are away from the Earth does not diminish our ability to see their varying degrees of distance from one another over the remaining dimensions of right ascension and declension.[17]

Berkeley's claim that visible and tangible spaces must be entirely distinct and heterogeneous because a visible line cannot be added to a tangible line to make one sum (NTV 131) should likewise have appeared inconsequential to

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17 Thomas Reid, writing only a few years later, and well before the mathematical developments I have mentioned, was able to observe that "It is true that the distance of an object from the eye is not immediately seen; but there is a certain kind of distance of one object from another which we see immediately. [Berkeley] acknowledges, that there is a visible extension, and visible figures, which are proper objects of sight; there must therefore be a visible distance. Astronomers call it angular distance; and although they measure it by the angle, which is made by two lines drawn from the eye to the two distant objects, yet it is immediately perceived by sight, even by those who never thought of that angle." *Essays on the intellectual powers of man*. Edited by Derek R. Brookes. Edinburgh: Edinburgh University Press, 2002, Essay 2, ch. 10, p. 140. See also Reid, *Inquiry* 6.11: 116–117.

his contemporaries. Berkeley claimed that "quantities of the same kind may be added together and make one entire sum." But, he observed, mathematicians "add lines together: but they do not add a line to a solid, or conceive it as making one sum with a surface." He went on to claim that "these three kinds of quantity being thought incapable of any such mutual addition, and consequently of being compared together in the several ways of proportion, are by [mathematicians] esteemed entirely distinct and heterogeneous." But anyone reading his argument at the time would have thought that species, however "distinct and heterogeneous" can nonetheless still belong to the same genus. Whether or not eighteenth century mathematicians supposed lines, surfaces, and solids to be quantities of the same kind, they did consider them all be varieties of extensive magnitude or additive quantity, composed of parts set outside of one another over some number of dimensions.[18] The fact that a

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18   "The Subject of *Geometry*, is *Magnitude* or *Quantity continued* . . . Magnitudes are of three Kinds, *viz. Lines, Superfices* and *Solids*. A *solid* is that which hath *Length, Breadth* and *Depth* . . . A *Superfices* hath *Length* and *Breadth*, without *Thickness* . . . A *Line* then hath only *Length*." Hodgson, James. *A system of the mathematics*. 2 vols. London: Thomas Page, 1723, vol. 1, p. 1. "That Quantity which, being supposed without any Breadth or Thickness, is extended only in Length, is called a *Line*. That which hath both Length and Breadth (but is supposed to have no Thickness) is called a *Surface*, or *Superfices*: And that which hath Length, Breadth, and Thickness, is called a *Body*, or *Solid*." Pardies, Ignace Gaston. *Short, but yet Plain elements of Geometry*. Translated by John Harris, 7th ed. London: D. Midwinter and A Ward, 1734, p. 3. "Geometry is that science, by which we compare such quantities together as have extension. *Extension is distinguished into length, breadth, and thickness*. A line is that, which has length without breadth . . . A surface is that, which has length and breadth, only . . . A Solid is that, which has length, breadth, and thickness." Simpson, Thomas. *Elements of geometry* 5th ed. London: Luke Hansard, 1800, pp. 1–2. As the common comments made on the difference between lines, surfaces, and solids suggest, Berkeley's appeal to the authority of mathematicians proves both too little and too much—too little because many mathematicians recognized lines, surfaces, and solids to be members of a common genus of extended magnitude, and too much because to the extent that they did recognize specific differences between lines, surfaces, and solids they supposed them to entail that these things are so "entirely distinct and heterogeneous" that is possible for there to be surfaces without thickness and lines without thickness or breadth. This is incompatible with Berkeley's position on abstraction. If anything, the anti-abstractionist Berkeley ought to have viewed the argument of NTV 131 with dismay. For a slightly more congenial account of lines, surfaces, and solids see Cowley, John L. *Geometry Made Easy*. London: Watkins, Ayscough, Heath, et al., 1752, p. 5. Cowley still wrote of "the different species of extension" but recognized that length, breadth and depth are "in reality . . . inseparable" and held that it is merely possible for us to consider one dimension without reflecting on the others. But then they are so far from being "entirely distinct and heterogeneous" that they are aspects of a single whole.

visible line cannot be added to a tangible line to make an "entire sum" no more implies that visible lines are not spatially extended than the fact that a line cannot be added to a solid or a surface to make one sum implies that lines have no magnitude.

Taken as a whole, the arguments for the complete heterogeneity of the immediate objects of sight and touch offered in the final quarter of the *New theory* are very bad, turning either on *non sequitur* or equivocation.

There are three ways of understanding Berkeley's account of situation. Either it was only ever intended as an account of how we come to identify one of the directions on the visual field as the downward direction, or Berkeley mistakenly supposed that by showing that direction is not immediately perceived by vision he had shown that two dimensional order is not immediately perceived by vision, or he attempted to employ his discussion of situation to rhetorical effect, attempting to insinuate more than he was actually able to prove. The second alternative is less congenial to his intelligence, the third less to his honesty. However the first leaves him with no effective response to the challenge to his immaterialism posed by the fact that our own mental states (our visual and tactile sensations) appear to us as disposed in space. Berkeley clearly wanted to say, in the concluding quarter of the *New theory* and perhaps also at the outset of the *Theory vindicated* that we only immediately perceive light and colours. But he had no good argument to prove this and no way of explaining how, supposing it were so, we could have come to localize light and colours as we do.

Bibliography

Alanen, Lilli. "Reconsidering Descartes's Notion of the Mind-Body Union," *Synthese*, Vol. 106, No. 1 (1996), pp. 3–20.

Arnauld, Antoine. *Oeuvres de messire Antoine Arnauld*. Bruxelles: Culture et Civilisation, 1964–1967.

Artigas-Menant and McKenna, Antony (eds). *Le doute philosophique: philosophie classique et littérature clandestine*, special issue of *La Lettre Clandestine* 10, 2001.

Ayers, Michael. "Popkin's Revised Scepticism." *British Journal for the History of Philosophy* 12:2 (2004), pp. 319–332.

———— "Theories of Knowledge and Belief," in *The Cambridge History of Seventeenth Century Philosophy*, 2 vols., Garber, Daniel and Ayers, Michael (eds), Vol. 2, pp. 1003–61.

Baillet, Adrien. *La Vie de Descartes*, 2 vols. Paris: Daniel Horthemels, 1691.

Beaude, Joseph. "Cartésianisme et anticartésianisme de Desgabets," *Studia cartésiana* 1 (1979), pp. 1–24.

Beck, John L. *The Metaphysics of Descartes*. Oxford: Clarendon Press, 1965.

Beck, Leslie J. *The Method of Descartes*. London: Oxford University Press, 1952.

Bennett, Jonathan. "Descartes's Theory of Modality," *Philosophical Review* 103 (1994), pp. 639–67.

Berkowitz, Peter. *Virtue and the Making of Modern Liberalism*. Princeton: Princeton University Press, 1999.

Bermúdez, José Luis. "The Originality of Cartesian Skepticism: Did It Have Ancient or Mediaevel Antecedents?" *History of Philosophy Quarterly* 17:4 (2000), pp. 333–360.

Bernier, Marc André, and Charles, Sébastien (eds.). *Scepticisme et Modernité*. Saint-Étienne: Publications de l'Université de Saint-Étienne, 2005.

Boonin-Vail, David. *Thomas Hobbes and the Science of Moral Virtue*. Cambridge: Cambridge University Press, 1994.

Bracken, Harry M. "Bayle's attack on natural theology: the case of Christian Pyrrhonism," in *Scepticism and Irreligion in the Seventeenth and Eighteenth Centuries*, R.H. Popkin and Arjo Vanderjagt (eds.). Leiden: Brill, 1993, pp. 254–266.

Broughton, Janet and Mattern, Ruth. "Reinterpreting Descartes on the Notion of the Union of Mind and Body," *Journal of the History of Philosophy* 16 (1978), pp. 23–32.

Brown, Stuart. "The Proto-Monadology of the *De Summa Rerum*," in *The Young Leibniz and his Philosophy* (*1646–76*), Stuart Brown (ed.). Dordrecht: Kluwer, 1999, pp. 263–87.

Burnyeat, Myles. "Idealism and Greek Philosophy: What Descartes Saw and Berkeley Missed," *Philosophical Review* 91 (1982), pp. 3–40.

Cavaillé, Jean-Pierre. "Scepticisme, tromperie et mensonge chez La Mothe Le Vayer et Descartes," in *The Return of Skepticism from Hobbes and Descartes to Bayle*, Paganini, Gianni (ed). Dordrecht: Kluwer. 2003, pp. 115–131.

Chappell, Vere. "L'homme cartésian," in *Descartes: Objecter et répondre*, J.-M. Beyssade and J.-L. Marion (eds.). Paris: Presses Universitaires de France, 1994, pp. 403–26.

Charles, S., ed. *Le Scepticisme à l'Age Classique*, special issue of *Philosophiques*. 35:1, 2008.

Charron, Pierre. *De la sagesse*. Paris: Fayard, 1986.

Cohen, M.R., and Nagel, E. *An Introduction to Logic and Scientific Method*. New York: Harcourt, Brace & Co. 1934.

Cook, Monte. "Degabets on the Creation of Eternal Truths," *Journal of the History of Philosophy* 43 (2005), pp. 21–36.

——— "Desgabets as Cartesian Empiricist," *Journal of the History of Philosophy* 46 (2008), pp. 501–15.

Cottingham, John. "Cartesian Trialism," *Mind*, 94 (1985), pp. 218–30.

——— "The Mind-Body Relation," In *The Blackwell Guide to Descartes'* Meditations, Stephen Gaukroger (ed). Oxford: Blackwell Publishing, 2006, pp. 179–92.

Couissin, Pierre. "The Stoicism of the New Academy," in *The Skeptical Tradition*, Burnyeat, Michael (ed). Berkeley: University of California Press, 1983, pp. 31–63.

Cunning, David. *Argument and Persuasion in Descartes' Meditations*. New York: Oxford University Press, 2010.

Curley, Edwin M. *Descartes against the Skeptics*. Cambridge: Harvard University Press, 1978.

Darwall, Stephen. *The British Moralists and the Internal 'Ought'*. Cambridge: Cambridge University Press, 1995.

——— "Normativity and Projection in Hobbes's *Leviathan*." *Philosophical Review* 109: 313–47, 2000.

Descartes, René. *OEuvres de Descartes*, Adam, Charles and Tannery, Paul (eds). 11 vols. Paris: Vrin, 1964–1974.

——— *The Philosophical Writings of Descartes*, 3 vols., Cottingham, John, Stoothoff, Robert and Murdoch, Dugald (eds. and trans.); vol. 3 included Kenny, Anthony. Cambridge: Cambridge University Press, 1984.

——— *Oeuvres philosophiques*, 3 vols., F. Alquié (ed.). Paris, Bordas, 1992.

Desgabets, Robert. *Oeuvres Philosophiques Inédites*. Joseph Beaude (ed.). 7 vols., Analecta Cartesiana, 2–8. Amsterdam: Quadratures, 1983.

Easton, Patricia and Lennon, Thomas M. *The Cartesian Empiricism of François Bayle*. New York: Garland, 1992.

——— (ed.). *Logic and the Workings of the Mind*. Atascadero: Ridgeview Publishing, 1997.

——— "Desgabets," in *Routledge Encyclopedia of Philosophy*, ed. E. Craig. London: Routledge, 1998.

Ewin, R.E. *Virtue and Right: The Moral Philosophy of Thomas Hobbes*. Boulder: Westview Press, 1991.

Faye, Emmanuel. "The Cartesianisms of Desgabets and Arnauld and the Problem of the Eternal Truths," *Oxford Studies in Early Modern Philosophy*, Vol. 2, Garber, Daniel and Nadler, Steven (eds.). Oxford: Oxford University Press, 2005, pp. 193–209.

Fine, Gail. "Descartes and Ancient Skepticism: Reheated Cabbage?" *The Philosophical Review* 109:2 (2000), pp. 195–234.

Foucher, Simon. *Critique de la Recherche de la vérité*. New York: Johnson Reprint Corp., 1969.

Frankfurt, Harry. "Descartes on the Creation of the Eternal Truths," *Philosophical Review* 86 (1977), pp. 36–57.

Gabriel, Frédéric, ed. *Le scepticisme Chrétien (XVIe–XVIIe siècle)*, special issue of *Les Études Philosophiques*, Avril 2008.

Garber, Daniel. "Understanding Interaction: What Descartes Should have Told Elizabeth," *The Southern Journal of Philosophy*, 21 (1983), pp. 15–32.

——— *Descartes' Metaphysical Physics*. Chicago: Chicago University Press, 1992.

Gassendi, Pierre. *Dissertations en Forme de Paradoxes contre les Aristotéliciens*, bi-lingual French/Latin edition, Bernard Rochot (trans.). Paris: Vrin, 1959.

Gaukroger, Stephen. *Cartesian Logic*. Oxford: Oxford University Press, 1989.

——— *Descartes: An Intellectual Biography*. Oxford: Clarendon Press, 1995.

Gauthier, David. *The Logic of Leviathan*. Oxford: Clarendon Press, 1969.

Giocanti, Sylvia. *Penser l' irrésolution: Montaigne, Pascal, La Mothe Le Vayer*. Paris: Honoré Champon, 2001.

Gouhier, Henri. *Cartésianisme et augustinisme au XVIIe siècle*. Paris: J. Vrin, 1978.

Granada, Miguel. "Apologetique platonicienne et apologie sceptique," in *Le Scepticisme au XVIe et au XVIIe Siècle*, Moreau, Pierre-François (ed.). Paris: Albin Michel, 2001, pp. 11–47.

Grene, Marjorie. *Descartes among the Scholastics*. Milwaukee: Marquette University Press, 1991.

Groarke, Leo. "Descartes' First Meditation: Something Old, Something New, Something Borrowed," *Journal of the History of Philosophy* 22:3 (1984), pp. 281–301.

Gueroult, Martial. *Descartes selon l'ordre des raisons*. 2 vols., Paris: Aubier, 1968.

Gouhier, Henri. *La pensée métaphysique de Descartes*. Paris: Librairie philosophique J. Vrin. 1962.

Hacking, Ian. "Proof and Eternal Truths: Descartes and Leibniz," in *Descartes: Philosophy, Mathematics and Physics*, Stephen Gaukroger (ed.). Brighton: Harvester Press, 1980, pp. 169–180.

Hampton, Jean. *Hobbes and the Social Contract Tradition*. Cambridge: Cambridge University Press, 1986.

Hobbes, Thomas. *Behemoth, or the Long Parliament*, ed. Paul Seaward. Oxford: Clarendon Press, 2010.

——— *De Cive*, in *On the Citizen*, ed. Richard Tuck and Michael Silverthorne. Cambridge: Cambridge University Press, 1998.

——— *De Homine*, in Thomas Hobbes, *Man and Citizen*, ed. Bernard Gert. Indianapolis: Hackett, 1991.

——— *Leviathan. Revised Student Edition*, ed. Richard Tuck. Cambridge: Cambridge University Press, 1996.

——— *Opera Philosophica quae latine scripsit Omnia*, ed. William Molesworth. London, 1839–45; reprint Aalen, 1961.

Hoffman, Paul. "The Unity of Descartes's Man." *The Philosophical Review* 95 (1986), pp. 339–70.

——— "Cartesian Passions and Cartesian Dualism," *Pacific Philosophical Quarterly* 71 (1990), pp. 310–33.

——— "Cartesian Composites," *Journal of the History of Philosophy* 37 (1999), pp. 251–70.

——— "Descartes' Theory of Distinctions," *Philosophy and Phenomenological Research*, 64 (2002), pp. 57–78.

Huet, Pierre-Daniel. *Against Cartesian philosophy*. Translated by Thomas M. Lennon. Amherst, N.Y.: Humanity Books, 2003.

——— *Censura philosophiae cartsesianae*. Paris: 1689.

——— *Memoirs*, Charles Nisard (trans.). Toulouse: Societé de Litteratures Classiques, 1993.

——— *Against Cartesian Philosophy*, in the JHP Book Series, Lennon, Thomas M. (trans). New York: Humanity Books, 2003.

Hunter, Graeme and Inwood, Brad. "Plato, Leibniz, and the Furnished Soul," *Journal of the History of Philosophy*, 22:4 (1984), pp. 423–434.

Hutton, Sarah. "Henry More, John Finch, and *The History of Scepticism*," in *Skepticism in Renaissance and Post-Renaissance Thought: New Interpretations*, Maia, Neto and Popkin, Richard H. (eds.). Amherst, N.Y.: Humanity Books, 2004, pp. 43–64.

Jolley, Nicholas. "An Unpublished Leibniz MS on Metaphysics," *Studia Leibnitiana* VII (1975), p. 177.

——— *The Light of the Soul*. Oxford: Clarendon Press, 1990.

Kavka, Gregory S. *Hobbesian Moral and Political Philosophy*. Princeton: Princeton University Press, 1986.

Kenny, Anthony. "The Cartesian Circle and the Eternal Truths," *Journal of Philosophy* 67 (1968), pp. 685–700.

——— *Descartes: A Study of His Philosophy*. New York: Random House, 1968.

Kneale, W.C., and Kneale, Martha. *The Development of Logic*. Oxford: Oxford University Press, 1962.

Leibniz, Gottfried Wilhelm. *Die Philosophischen Schriften von G.W. Leibniz*. 7 vols, edited by Gerhardt, C.I. Berlin: Weidmann, 1875–90.

——— *G.W. Leibniz: Saemtliche Schriften und Briefe*. Darmstadt: Akademie Verlag, 1923.

——— *G.W. Leibniz*: *Textes inedits*. 2 vols, edited by G. Grua. Paris: Presses Universitaires de France, 1948.

——— *Philosophical papers and letters; of G.W. Leibnitz*, translated and edited by Leroy E. Loemker. Dordrecht: Reidel. 1969.

——— *De Enthusiasmo Platonico*, 25 June 1707. In L.L. Dutens ed., *G.G. Leibnitii Opera Omnia*, 6 vols., Geneva, 1768, vol. II, pp. 222–225.

——— *G.W. Leibniz: New Essays on Human Understanding*, translated and edited by Remnant, Peter and Bennett, Jonathan. Cambridge: Cambridge University Press, 1981.

——— and Arnauld, Antoine. *The Leibniz-Arnauld correspondence*; Edited by Haydn Trevor Mason. New York: Garland, 1985.

Lennon, Thomas M. *The Battle of the Gods and Giants: The Legacies of Descartes and Gassendi, 1655–1715*. Princeton: Princeton University Press, 1993.

——— "Pandora/or, Essence and Reference: Gassendi's Nominalist Objection and Descartes' Realist Reply," in *Descartes and his Contemporaries*, Ariew, Roger and Grene, Marjorie (eds.). Chicago: Chicago University Press. 1995, pp. 159–181.

——— "The Cartesian Dialectic of Creation." In *The Cambridge History of Seventeenth-Century Philosophy*, ed. D. Garber and M. Ayers. Cambridge: Cambridge University Press, 1998.

——— "Huet, Malebranche and the Birth of Scepticism." *The Return of Scepticism from Hobbes and Descartes to Bayle*. Ed. Gianni Paganini. Dordrecht: Kluwer Academic Pub, 2003.

——— "The Rationalist Conception of Substance," in *A Companion to Rationalism*, Nelson, Alan (ed). Malden, MA: Blackwell, 2005, pp. 12–30.

——— "The Eleatic Descartes," *Journal of the History of Philosophy*, Vol. 45, No. 1 (2007), pp. 29–45.

——— *The Plain Truth: Descartes, Huet, and Skepticism*. Leiden: Brill, 2008.

——— "Descartes, Arcesilau e a estrutura da epokhé," *Filosofia e Educação* 25 (2011), pp. 37–62.

Long. A.A. and Sedley, D.N. *The Hellenistic philosophers*. 2 vols., Cambridge: Cambridge University Press, 1987.

Mackie, J.L. *Problems from Locke*. Oxford: Oxford University Press, 1976.

Maclean, Ian. "The 'Sceptical Crisis' Reconsidered: Galen, Rational Medicine and the *Libertas Philosophandi*." *Early Science and Medicine* 11:3 (2006), pp. 247–274.

Maia Neto, José R., and Pereira Maia, Elene C. "Boyle's Carneades," *Ambix* 49:2 (2002), pp. 97–111.

——— "Foucher's Academic Skepticism." In *Cartesian Views*, Thomas M. Lennon (ed.). Leiden: Brill, 2003, pp. 71–95.

———, and Popkin, Richard H., eds. *Skepticism in Renaissance and Post-Renaissance Thought: New Interpretations*. Amherst, N.Y.: Humanity Books, 2004.

——— "Descartes sceptique cartésien." *Philosophiques* 35:1 (2008), pp. 223–239.

——— "Charron and Huet: Two Unexplored Legacies of Popkin's Scholarship on Early Modern Skepticism," in *The Legacies of Richard Popkin*, Popkin, Jeremy (ed.). Dordrecht: Springer, 2008, pp. 155–173.

———, Paganini, Gianni, and Laursen, John Christian, eds. *Skepticism in the Modern Age. Building on the work of Richard Popkin*. Leiden: Brill, 2009.

Malebranche, Nicholas. *Oeuvres complètes*. Edited by André. Robinet. 23 vols. Paris: Librairie J. Vrin, 1958.

——— *The Search After Truth*, Lennon, Thomas M. and Olscamp, Paul J. (trans.). Columbus: Ohio State University Press, 1980.

Marcondes, Danilo. "The Anthropological Argument: The Rediscovery of Ancient Skepticism in Modern Thought." *Skepticism in the Modern Age. Building on the work of Richard Popkin*, Paganini, Gianni, and Laursen, John Christian (eds). Leiden: Brill, 2009, pp. 36–54.

Marion, Jean-Luc. *Sur L'Ontologies Grise de Descartes* (*2nd Ed*). Paris: Vrin, 1981.

——— "Cartesian Metaphysics and the Role of the Simple Natures." in *The Cambridge Companion to Descartes*, John Cottingham (ed.). Cambridge: Cambridge University Press, 1992, pp. 115–139.

Martinich, A.P. *The Two Gods of Leviathan: Thomas Hobbes on Religion and Politics*. Cambridge: Cambridge University Press, 1992.

Mates, Benson. *The Philosophy of Leibniz: Metaphysics and Language*. Oxford: Oxford University Press, 1986.

Mehl, Edouard. "La Question du Premier Principe dans *La Recherche de la Vérité*," *Nouvelles de la Republique des Lettres*. 1999–1, pp. 77–97.

Menn, Stephen Philip. *Descartes and Augustine*. Cambridge; New York: Cambridge University Press, 1998.

Mercer, Christia. *Leibniz's Metaphysics: Its Origin and Development*. New York and Cambridge: Cambridge University Press, 2000.

Minar, Robert C. "Is Hobbes a Theorist of the Virtues?" *International Philosophical Quarterly* 41 (2001), pp. 269–84.

Mitsis, Phillip. "The Stoics and Aquinas on Virtue and Natural Law," *The Studia Philonica Annual* 15 (2003), pp. 35–53.

Moreau, Denis. *Deux Cartesiens: la polemique entre Antoine Arnauld et Nicolas Malebranche*. Paris: J. Vrin, 1999.

Moreau, Pierre-François, ed. *Le Scepticisme au XVIe et au XVIIe Siècle*, Paris: Albin Michel, 2001.

Nadler, Steven. "Arnauld's God," *Journal of the History of Philosophy* 46 (2008), pp. 517–38.

Naya, Emmanuel. "Renaissant Pyrrhonism: a Relative Phenomenon," in *Renaissance Skepticisms*, Paganini, Gianni and Maia, Neto (eds.). Dordrecht: Springer, 2009, pp. 13–32.

Nelson, Alan. "Descartes' Ontology of Thought," *Topoi*, 16 (1997): 163–78.

——— "Cartesian Innateness," in *A Companion to Descartes*, Broughton, Janet and Carriero, John (eds.). Oxford: Blackwell, 2008, pp. 319–332.

Newman, Lex, and Nelson, Alan. "Circumventing Cartesian Circles." *Nous*, Vol. 33, No. 3 (1999), pp. 370–404.

Nolan, Lawrence. "Reductionism and Nominalism in Descartes' Theory of Attributes," *Topoi*, 16 (1997), pp. 129–40.

——— "The Ontological Status of Cartesian Natures." *Pacific Philosophical Quarterly*, 78 (1997), pp. 169–94.

——— "Descartes' Theory of Universals," *Philosophical Studies*, 89 (1998), pp. 161–80.

——— "The Role of the Imagination in Rationalist Philosophies of Mathematics," in *A Companion to Rationalism*, Nelson, Alan (ed.). Oxford: Blackwell, 2005, pp. 224–49.

——— "The Ontological Argument as an Exercise in Cartesian Therapy." *Canadian Journal of Philosophy*, 35 (2005), pp. 521–62.

——— "Descartes on 'What We Call Color'," in *Primary and Secondary Qualities*: *the Historical and Ongoing Debate*, Nolan, Lawrence (ed.). Oxford: Oxford University Press, 2011, pp. 82–108.

Normore, Calvin. "The Necessity in Deduction: Cartesian Inference and its Medieval Background," *Synthese* 96 (1993): 437–454.

Owen, David. *Hume's Reason*. Oxford: Oxford University Press, 1999.

Paganini, Gianni, Benitez, Miguel, and Dybikowski, James, eds. *Scepticisme, Clandestinité et Libre Pensée*. Paris: Honoré Champion, 2002.

Paganini, Gianni (ed). *The Return of Skepticism from Hobbes and Descartes to Bayle*. Dordrecht: Kluwer. 2003.

——— *Skepsis. Le débat des moderns sur le scepticisme*. Paris: Vrin, 2008.

———, and Maia Neto, José R., eds. *Renaissance Skepticisms*. Dordrecht: Springer, 2009.

Perler, Dominik. "Was There a 'Pyrrhonian Crisis' in Early Modern Philosophy? A Critical Notice of Richard Popkin." *Archiv fur Geschichte der Philosophie* 86 (2004), pp. 209–220.

Plato. *Five Dialogues*, translated by Grube, G.M.A. Indianapolis: Hackett Publishing, 2002.

Popkin, Richard H. *The History of Scepticism from Erasmus to Descartes*. Assen, Netherlands: Van Gorcum, 1964.

——— *The History of Scepticism from Erasmus to Spinoza*. Berkeley: University of California Press, 1979.

——— *The History of Scepticism from Savonarola to Bayle*. Oxford: Oxford University Press, 2003.

Radner, Daisie. "Descartes's Notion of the Union of Mind and Body," *Journal of the History of Philosophy* 9 (1971), pp. 159–70.

——— "Rejoinder to Professors Loeb and Richardson." *Journal of the History of Philosophy*, 23 (1985), pp. 232–36.

Régis, Pierre-Sylvain. *L'usage de la raison et de la foi*. Edited by Jean Robert Armogathe. Paris: Fayard, 1996.

——— *Réponse au Livre . . . Censura. . . .* Paris, 1691.

Richardson, R.C. "The 'Scandal' of Cartesian Interactionism," *Mind* 91 (1982), pp. 20–37.

Rigault, Hippolyte. *Histoire de la querelle des anciens et des modernes*. New York: B. Franklin, 1965.

Riley, Patrick. *Leibniz's Universal Jurisprudence: Justice as the Charity of the Wise*. Cambridge, Mass. Harvard University Press, 1996.

Rodis-Lewis, Geneviève. *L'Individualité selon Descartes*, Paris: J. Vrin, 1950.

——— "Polemiques sur la création des possibles et sur l'impossible dans l'ecole Cartésienne." In *Idées et vérités éternelles chez Descartes et ses successeurs*. J. Vrin, 1985.

Rozemond, Marleen. *Descartes's Dualism*. Cambridge: Harvard University Press, 1998.

Ryle, Gilbert. *The Concept of Mind*. New York: Barnes & Noble, Inc., 1949.

Sacada, Jorge. *Cartesian Metaphysics. The Late Scholastic Origins of Modern Philosophy*. Cambridge: Cambridge University Press, 2000.

Scheffler, Israel. "On Ryle's Theory of Propositional Knowledge." *Journal of Philosophy*, Vol. 65, No. 22 (1968), pp. 725–32.

——— *Conditions of Knowledge*. Chicago: University of Chicago Press, 1983.

Schmaltz, Tad M. "Platonism and Descartes' View of Immutable Essences." *Archiv Für Geschichte der Philosophie*, 73 (1991), pp. 129–70.

——— "Descartes and Malebranche on Mind and Mind-Body Union," *The Philosophical Review*, 101 (April 1992), pp. 281–325.

——— *Radical Cartesianism: The French Reception of Descartes*. Cambridge: Cambridge University Press, 2002.

——— *Descartes on Causation*. New York: Oxford University Press, 2008.

Schneewind, J.B. "The Misfortunes of Virtue." *Ethics* 101 (1990): 43–63. Reprinted in Schneewind, *Essays on the History of Moral Philosophy*. Oxford: Oxford University Press, 2010.

Schurman, Anna Maria van, Joyce L. Irwin, and Gijsbert Voet. *Whether a Christian woman should be educated and other writings from her intellectual circle*. Chicago: University of Chicago Press, 1998.

Schuster, John. "Descartes' *Mathesis Universalis* 1619–28." in *Descartes: Philosophy, Mathematics and Physics*, Stephen Gaukroger (ed.). Brighton: Harvester Press, 1980, pp. 41–96.

Sihvola, Juha, ed. *Ancient Scepticism and the Sceptical Tradition* Helsinki: Acta Philosophica Fennica, 2000.

Skinner, Quentin. "Thomas Hobbes: Rhetoric and the Construction of Morality," *Proceedings of the British Academy* 76 (1991), pp. 1–61.

——— *Reason and Rhetoric in the Philosophy of Hobbes*. Cambridge: Cambridge University Press, 1996.

Smith, Kurt. "A General Theory of Cartesian Clarity and Distinctness Based On the Theory of Enumeration in the *Rules*," *Dialogue*, XL (2001), pp. 279–309.

——— *Matter Matters: Metaphysics and Methodology in the Early Modern Period*. Oxford: Oxford University Press, 2010.

Sowaal, Alice. "Cartesian Bodies," *Canadian Journal of Philosophy*. Vol. 34, No. 2 (2004), pp. 217–240.

——— "Descartes's Reply to Gassendi: How We Can Know All of God, All at Once, but Still Have More to Learn about Him," *British Journal for the History of Philosophy* 19(3) (2011), pp. 419–49.

Taylor, A.E. "The Ethical Doctrine of Hobbes," *Philosophy* 13 (1938), pp. 402–424.

Voss, Stephen. "Descartes: the End of Anthropology," in *Reason, Will, and Sensation*, J. Cottingham (ed.). Oxford: Clarendon Press, 1994, pp. 273–306.

Wahl, Russell. "How Can What I Perceive Be True?" *History of Philosophy Quarterly*, Vol. 12 No. 2 (April 1995), pp. 185–194.

Warrender, Howard. *The Political Philosophy of Hobbes: His Theory of Obligation*. Oxford: Clarendon Press, 1957.

Watkins, J.W.N. *Hobbes's System of Ideas*, 2nd Ed. London: Hutchinson, 1973.

Watson, Richard. *Cogito, Ergo Sun: The Life of René Descartes*. Boston: David R. Godine, 2002.

Williams, Bernard. *Descartes: the Project of Pure Inquiry*. New York: Penguin Books 1978.

Williams, Michael. "Descartes's Metaphysics of Doubt," in *Essays on Descartes' Meditations*, Rorty, Amelie (ed.). Los Angeles: University of California Press, 1986, pp. 117–139.

Wilson, Margaret. *Descartes*. London: Routledge, 1978.

Wittgenstein, Ludwig. *Remarks On Colour*, McAlister, Linda and Schättle, Margarete (trans.), Anscombe, G.E.M. (ed.). Los Angeles: University of California Press, 1978.

——— *Zettle*, Anscombe, G.E.M. (trans.), Anscombe, G.E.M and von Wright, G.H. (eds.). Los Angeles: University of California Press, 1970.

Wong, David. "Cartesian Deduction." *Philosophy Research Archives* 8 (1982), pp. 1–19, 1982.

Yandell, D. "Did Descartes Abandon Dualism? The Nature of the Union of Mind and Body," *British Journal for the History of Philosophy*, 7 (1999), pp. 199–217.

Thomas M. Lennon Bibliography

Books, Monographs, etc.

The Plain Truth: Descartes, Huet, and Skepticism. Leiden: Brill, 2008.

The Achilles of Rationalist Psychology, ed. with R. Stainton. Dordrecht: Springer, 2008.

Against Cartesian Philosophy: Pierre-Daniel Huet's Censura Philosophiae Cartesianae, edited, translated, annotated and introduced. Amherst, NY: Humanity Books/ Prometheus, 2003, *Journal of the History of Philosophy Book Series*, no. 1.

Cartesian Views: Essays presented to Richard A. Watson, edited. Leiden: E.J. Brill, 2003.

Reading Bayle. Toronto: University of Toronto Press, 1999.

The Search After Truth, with P.J. Olscamp, and *Elucidations of the Search After Truth*. A new edition of the works by Malebranche below with a new introduction, bibliography, chronology and Latin translations, all by TML. Cambridge: Cambridge University Press, 1997.

The Battle of Gods and Giants: The Legacies of Descartes and Gassendi, 1655–1715. Princeton: Princeton University Press, 1993.

The Cartesian Empiricism of François Bayle, with Patricia Easton. New York: Garland Publishing, 1992.

Malebranche, Nicolas. *The Search After Truth*, translation with P.J. Olscamp of *De la recherche de la vérité*. Columbus: The Ohio State University Press, 1980. Selections reprinted in: *Malebranche: Philosophical Selections*, ed. S. Nadler. Indianapolis: Hackett, 1992.

——— *Elucidations of the Search After Truth*, translation of *Eclaircissements*. Columbus: The Ohio State University Press, 1980, pp. 531–861. Selections reprinted in Nadler supra.

A Philosophical Commentary, in Nicolas Malebranche, *The Search After Truth*. Columbus: The Ohio State University Press, 1980, pp. 755–848. Reprinted in Nicolas Malebranche (vol. 11 of *Essays on early modern philosophy*) ed. V. Chappell. New York: Garland, 1992, pp. 167–257.

Bibliographia Malebranchiana: A Critical Guide to the Malebranche Literature into 1989, with Patricia Easton and Gregor Sebba. Carbondale: Southern Illinois University Press, 1992 (for the *Journal of The History of Philosophy Monograph Series*).

Thought and Language in The Philosophy of the Enlightenment, edited with R.E. Butts, *Synthese*, Vol. 75, 2 (1988).

Problems of Cartesianism, edited with J.M. Nicholas and J.W. Davis. Kingston and Montreal: McGill-Queen's University Press, 1982.

Articles

"Leibniz, Bayle, and the Quietist Controversy," in *Leibniz et Bayle*, ed. Christian Leduc, Paul Rateau, Jean-Luc Solère. Stuttgat: Franz Steiner Verlag, 2014, pp. 343–60.

"Quietist Pure Love: the impossible supposition?" *International Journal of Philosophy and Theology* 74 (2014), pp. 258–73.

"Descartes's Supposed Libertarianism: Letter to Mesland or Memorandum concerning Petau?," *Journal of the History of Philosophy*, 51 (2013), pp. 223–48.

"The Skepticism of the First Meditation," with Michael W. Hickson, *Cambridge Companion to Descartes's Meditations: A critical guide*, ed. Karen Detlefson. Cambridge: Cambridge University Press, 2013, pp. 9–24.

"Descartes's Theodicy *avant la lettre*," in *The Cambridge Companion to Descartes's Meditations*, ed. D. Cunning. Cambridge: Cambridge University Press, 2013, pp. 168–185.

"Descartes and Pelagianism," *Essays in Philosophy* 14 (2013), pp. 194–217.

"Malebranche, The Quietists, and Freedom," with Julie Walsh, *British Journal for the History of Philosophy* 20 (2012), pp. 69–108.

"Descartes and the Seven Senses of Indifference in Early modern Philosophy," *Dialogue: Journal of the Canadian Philosophical Association*, 50 Special Issue 3 (September, 2011), pp. 577–602.

"Volition: Malebranche's Thomist Inclination," *The Modern Schoolman*, 88 (2011), pp. 171–89.

"Malebranche, The Quietists, and Freedom," with Julie Walsh, *British Journal for the History of Philosophy* 20 (2012), pp. 69–108.

"The Main Part and Pillar of Berkeley's Theory: Idealism and perceptual heterogeneity," *The Southern Journal of Philosophy* 49 (2011), pp. 91–115.

"Descartes, Arcesilau e a estratura da epokhé," *Educação e Filosofia* 25 (2011), pp. 37–62.

"Locke on Body and Extension (*Essay* II.xiii.11–14)," *Locke Studies* (2010), pp. 15–25.

"Bayle et l'Achille': L'unité de conscience," in *Les « Eclaircissements » de Pierre Bayle*, ed. Hubert Bost, Antony McKenna. Paris: Honoré Champion, 2010, pp. 161–71.

"The Real Significance of Bayle's Authorship of the *Avis*," with Michael W. Hickson, *British Journal for the History of Philosophy* 17 (2009), pp. 191–205.

"La réponse de Regis à Huet sur le doute cartésien," *Philosophiques* 35 (2008), pp. 241–60.

"The Historical Consistency of Berkeley's Idealism," *The British Journal for the History of Philosophy* (January 2008), pp. 101–24.

"Cudworth and Bayle: An odd couple?" in, *The Achilles of Rationalist Psychology*, ed. with R. Stainton. Dordrecht: Springer, 2008, pp. 139–58.

"The Significance of Descartes's Objection of Objections," in *Contemporary Perspectives on Early Modern Philosophy: Essays in honor of Vere Chappell*, Gideon Yaffe, David Owen, Paul Hoffman eds. Broadview Press, 2008, pp. 65–79.

"Descartes's Legacy in The Seventeenth Century: Problems and Polemic," in *A Companion to Descartes*, John Carriero and Janet Broughton eds. Oxford: Blackwell, 2008, pp. 467–81.

"L'Atomism de Gassendi: taille, figure et temps," *Gassendi et la modernité*, ed. Sylvie Taussig. Turnhout, Belgium: Brepols, 2008, pp. 39–59.

"Continental Rationalism," with Shannon Dea, *The Stanford Encyclopedia of Philosophy*, on line: http://plato.stanford.edu/entries/continental-rationalism/#Malebranche.

"Proust and the Phenomenology of Memory," *Philosophy and Literature*, 31 (2007), 52–66.

"The Genesis of Berkeley's *New Theory of Vision Vindicated*," *The History of European Ideas*, 33 (2007), pp. 21–29.

"Locke on Ideas and Representation," in *The Cambridge Companion to Locke's Essay*, ed. Lex Newman. Cambridge: Cambridge University Press, 2007, pp. 231–57.

"The Eleatic Descartes," *Journal of the History of Philosophy*, 45 (2007), pp. 29–47.

"The Significance of the Barrovian Case," *Studies in the History and Philosophy of Science*, 38 (2007), pp. 36–55.

"Christ from the Head of Jupiter: An epistemological note on Huet's Treatment of the Virgin Birth," in *Virginity Revisited: Configurations of the unpossessed body*, ed. B. MacLachlan & Judith Fletcher. University of Toronto Press, 2007, pp. 149–55.

"Enigmatic Bayle," *The British Journal for the History of Philosophy*, 14 (2006), pp. 773–85.

"Theology and the God of the Philosophers," in *The Cambridge Companion to Early Modern Philosophy*, ed. Donald Rutherford. Cambridge University Press, 2006, pp. 274–98.

"The Skepticism of Huet's *Traité de la foiblesse de l'esprit humain*," in *Scepticisme et modernité*, ed. Sébastien Charles and Marc-André Bernier. Saint-Etienne, France: Publications de l'Université de Sainte-Etienne, 2005, pp. 65–75.

"The Rationalist Conception of Substance," in *A Companion to Rationalism*, Alan Nelson, ed. Oxford: Blackwell, 2005, pp. 12–30.

"Huet on The Reality of Cartesian Doubt," in *The Reception of Descartes's Philosophy*, ed. Tad Schmaltz. London: Routledge, 2005, pp. 63–79.

"Bayle on Hobbes's Alleged Atheism," in *Aufklärung*, ed. Lothar Kreimendahl. Munich: Felix Meiner Verlag, 2004, pp. 67–77.

"Through A Glass Darkly: More on Locke's Logic of Ideas: A Reply to Chappell," *Pacific Philosophical Quarterly* 85 (2004), pp. 322–37.

"The Logic of Ideas and the Logic of Things," *Pacific Philosophical Quarterly*, 85 (2004), pp. 356–60.

"Descartes and the Objections of Objections," *O que nos faz pensar?* (Cadernos do Departmento de Filosofia da PUC-Rio, Brazil) 18 (2004), pp. 165–82.

"A Rejoinder to Mori," *Journal of the History of Ideas* 65 (2004), pp. 335–41.

"Bayle and Socinianism," *Pierre Bayle dans la République des Lettres: Philosophie, religion, critique*, ed. Antony McKenna & Gianni Paganini. Paris: H. Champion, 2004, pp. 171–191.

"Huet, Descartes and The Objection of Objections," in *Skepticism in Renaissance and Post-Renaissance Thought*, José R. Maia Neto and Richard H. Popkin, eds. Amherst, NY: Humanity Books, 2004, pp. 123–42.

"Foucher, Huet and the Downfall of Cartesianism," in *Cartesian Views: Essays presented to Richard A. Watson*. Leiden: E.J. Brill, 2003, pp. 117–128.

"Malebranche, Huet and The Birth of Skepticism," in *The Return of Skepticism: From Hobbes and Descartes to Hume*, ed. G. Paganini. Dordrecht: Kluwer, 2003, pp. 149–65.

"Pierre Bayle," *The Stanford Encyclopedia of Philosophy*. On-line: http://plato.stanford .edu/entries/bayle/.

"What Kind of a Skeptic Was Bayle?," *Midwest Studies In Philosophy* XXVI (2002), pp. 258–79.

"True Believers: The response of Malebranche and Huet to Descartes's *Meditations*," with D.A. Larivière, *Kriterion*, 106 (2002), pp. 89–107.

"Did Bayle Read Saint-Evremond?," *Journal of the History of Ideas* LXII (2002), pp. 225–37.

"The History and Significance of Hume's Example of the Burning Coal Example," with D.A. Larivière, *Journal of Philosophical Research*, Vol. 27 (2002), pp. 511–26.

"Berkeley on the Act-object Distinction," *Dialogue*, XL (2001), pp. 651–67.

"Bayle on The Moral Problem of Evil," with D.A. Larivière, in *The Problem of Evil in Early Modern Philosophy*, eds. E.J. Kremer & M.J. Latzer. Tornto: University of Toronto Press, 2001, pp. 101–18.

"Locke and the Logic of Ideas," *History of Philosophy Quarterly* 18 (2001), pp. 155–177.

"Faith and Reason: John Paul II and Descartes," *The Modern Schoolman* 78 (2001), pp. 301–316.

"Gambling and the naturalization of Providence at the end of the seventeenth century," in *Materia Actuosa: Antiquité, age classique, lumières* (Mélanges en l'honneur d'Olivier Bloch) ed. M. Benitez et al. Paris: Honoré Champion, 2000, pp. 218–27.

"A correspondência entre Locke e Molyneux," with D.A. Larivière, *Discurso* 31 (2000), pp. 157–200.

"Malebranche on Method," *The Cambridge Companion to Malebranche*, ed. S. Nadler. Cambridge: Cambridge University Press, 2000, pp. 8–30.

"Bayle and Late Seventeenth-century Thought," in *Psyche and Soma*, ed. J.P. Wright & P. Potter. Oxford: Clarendon Press, 2000, pp. 197–215.

"Cartesianism," in *The History of Science and Religion in the Western Tradition: An Encyclopedia*, ed G.B. Ferngren. New York: Garland, 2000, pp. 146–48.

"Leibniz on Cartesianism: the Case of Malebranche," in *il cannochiale*, ed G. Hunter, 1999, pp. 67–100.

"Regis, Pierre-Sylvain," *The Routledge Encyclopedia of Philosophy*. London: Routledge, 1998, vol. VIII, pp. 165–66.

"Bernier, François," *The Routledge Encyclopedia of Philosophy*. London: Routledge, 1998ol. I, pp. 756–58.

"Bennett on Ideas and Qualities in Locke's *Essay*," *The Locke Newsletter* No. 29 (1998), pp. 13–21.

"Bayle's Anticipation of Popper," *Journal of the History of Ideas* (1997), pp. 695–705.

"The Cartesian Dialectic of Creation," *The Cambridge History of Seventeenth-Century Philosophy*, ed. M.J. Ayers & D. Garber. Cambridge: University Press, 1997, pp. 331–62.

Bio-bibliographical entries for F. Bernier (p. 1404), R. Desgabets (pp. 1421–22), P. Gassendi (pp. 1429–30), N. Malebranche (pp. 1456–57), P. Poiret (pp. 1456–57).

"Gassendi et Pierre Bayle: Deux acolytes de Clio," in *Gassendi et l'Europe (1592–1792)*, ed. S. Murr. Paris: J. Vrin, 1997, pp. 165–74.

"Bayle, Locke and the Metaphysics of Toleration," *Oxford Studies in The History of Philosophy*, ed. M.A. Stewart (1997), pp. 177–95.

"Arnauld and Scepticism: *questions de fait* and *questions de droit*," in *Interpreting Arnauld*, ed. E. Kremer. Toronto: University of Toronto Press, 1996, pp. 51–63.

"Taste and Sentiment: Hume, Bayle, Jurieu and Nicole," in *Pierre Bayle: la foi dans le doute*, ed. O. Abel & P.-F. Moreau. Geneva: Labor et Fides, 1995, pp. 49–64.

"Descartes and Gassendi: A Reply to Glouberman," in *Perspectives on Science*, vol. 3, no. 4 (1995), pp. 520–33.

"Pandora, or Essence and Reference: Gassendi's nominalist objection and Descartes's realist reply," *in Descartes and His Contemporaries*, ed. R. Ariew & M. Grene. Chicago: University of Chicago Press, 1995, pp. 159–181.

"The Problem of Individuation among the Cartesians," in *Individuation and Identity in Early Modern Philosophy: Descartes to Kant*, eds. K Barber & J.J.E. Gracia. Albany: State University of New York Press, 1994, pp. 13–39.

"Mechanism As A Silly Mouse: Bayle's Defense of Occasionalism against The Pre-established Harmony," in *Causation in Early Modern Philosophy*, ed. Steven Nadler. Pennsylvania State University Press, 1993, pp. 179–95.

"The Contagious Communication of Strong Imaginations: History, Modernity, and Scepticism in the Philosophy of Malebranche," in *The Rise of Modern Philosophy*, ed. Tom Sorell. Oxford: Clarendon Press, 1993, pp. 197–211.

"François Bernier," in *Grundriss der Geschichte der Philosophie*, ed. Rudolf W. Meyer. Basel: Verlag Schwabe, 1993, pp. 242–50.

"Gilles de Launay, in *Grundriss der Geschichte der Philosophie*, ed. Rudolf W. Meyer. Basel: Verlag Schwabe, 1993, pp. 250–57.

"Malebranche's Argument for Ideas and its Systematic Significance," in *Minds, Ideas and Objects: Essays on the theory of representation in modern philosophy*, eds. Phillip D. Cummins & Guenter Zoeller, *North American Kant Society Studies in Philosophy*. Atascadero, CA: Ridgewood Publishing, 1992, pp. 57–71.

"La logique janséniste de la liberté," *Revue d'Histoire et de Philosophie Religieuses*, No. 1 (1979), pp. 37–44. (Reprinted in *Port-Royal to Bayle* (Vol. 4 of *Essays in early modern philosophy*), ed. V. Chappell. New York: Garland, 1992, pp. 71–92.)

"Lady Oracle: Changing Conceptions of Authority and Reason in Seventeenth-Century Philosophy," in *Women and Reason*, E. Harvey & K. Okruhlik eds. Ann Arbor: University of Michigan Press, 1992, pp. 39–61.

"Malebranche," *Handbook of Metaphysics and Ontology*, ed. H. Burkhardt & B. Smith. Munich: Philosophia Verlag, 1991, Vol. 2, pp. 483–85.

"The Epicurean New Way of Ideas: Gassendi, Locke and Berkeley," in *Atoms, Pneuma and Tranquility: Epicurean and Stoic Themes in European Thought*, ed. M. Osler. Cambridge: University Press, 1991, pp. 259–71.

"Physical and Metaphysical Atomism: 1666–1682," in *An Intimate Relation: Studies in the History and Philosophy of Science Presented to R.E. Butts on his 60th Birthday*, eds. J.R. Brown & J. Mittelstrass. Dordrecht: Kluwer Academic Publishers, 1989, pp. 81–95.

"Berkeley And The Ineffable," *Synthèse*, Vol. 75 (1988), pp. 231–250.

"Descartes' Idealism," in *Philosophie et Culture, Actes du XVIIᵉ Congrès Mondial de Philosophie*, Vol. IV. Montreal: Editions de Beffroi, Editions Montmorency, 1986, pp. 53–56.

"Veritas Filia Temporis: Hume on time and causation," *History of Philosophy Quarterly*, Vol. II, No. 3 (July 1985), pp. 275–290. Reprinted in *David Hume: Critical Assessments*, ed. Stanley Tweyman, Vol. 3. London: Routledge, 1995, pp. 344–60.

"Rules and Relevance: The RU-AU Equivalence Issue," *Idealistic Studies*, XIV, No. 2 (May 1984), pp. 148–158.

"Sources et signification de la théorie lockienne de l'espace," *Dialogue* XXII (1983), pp. 3–14.

"Empirisme et théorie de l'espace chez Locke (en réponse à F. Duschesneau)," *Dialogue*, XXII (1983), pp. 19–21.

"Locke's Atomism," *Philosophy Research Archives*, Vol. IX (1983), pp. 1–28.

"Malebranche," *The Critical Bibliography of French literature*, Vol. IIIA, ed. H. Gaston Hall Syracuse: The Syracuse University Press, 1983, pp. 371–96.

"The Leibnizean Picture of Descartes," in *Nature Mathematized*, ed. William R. Shea. Dordrecht: D. Reidel, 1983, pp. 215–226.

"Hume's Conditions for Causation: Further to Gray and Imlay," *Hume Studies*, VIII, No. 2 (1982), pp. 119–124.

"Representationalism, Judgment and Perception of Distance: Further to Yolton and McRae," *Dialogue*, XIX, No. 1 (1980), pp. 151–162.

"Hume's Ontological Ambivalence: The Missing Shade of Blue," *The Southern Journal of Philosophy*, Vol. XVII, No. 1 (1979), pp. 77–84. Reprinted in *David Hume: Critical Assessments*, Vol. 3, ed. Stanley Tweyman. London: Routledge, 1995, pp. 195–206.

"Occasionalism, Jansenism and Skepticism: Divine Providence and the Order of Grace," *The Irish Theological Quarterly*, Vol. 45, No. 3 (1978), pp. 185–190.

"Jansenism and the Crise Pyrrhonienne," *Journal of the History of Ideas*, Vol. 38 (April 1977), pp. 297–306.

"Occasionalism and the Cartesian Metaphysic of Motion," *Canadian Journal of Philosophy*, Suppl. Vol. 1974, pp. 29–40. (Reprinted in *Cartesian Philosophers*, Vol. 3, of *Essays in early modern philosophy*), ed. V.C. Chappell. New York: Garland, 1992, pp. 71–92.

"The Inherence Pattern and Descartes' *Ideas*," *Journal of the History of Philosophy*, Vol. 12 (1974), pp. 43–52.

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